

MALANDA NEWS & ST
EARTH GARDEN
GG 03/06 F 32
W36 \$ 4.50

Winter
tation-grown paper with soya-based inks

Number 104

June - August 1998

\$4.50*

NZ \$5.95 inc GST

— SELF SUFFICIENCY AND PLANET CARE —

EARTH GARDEN

— FOR BUSH OR CITY ALTERNATIVES —

 **GLEANNING: Free**
Fruit For The Taking

**LAND LINES:
FIND YOUR
DREAM LAND**

 **Grafting
Bumper
Crops**

 **Getting Goats**

 **'Green' Log Homes**

 **Permaculture Hindsight**

 **Protect Your Land Forever**

 **Jill's Old-Time Farm Hints**

 **Worm
Farmers
Tell All**

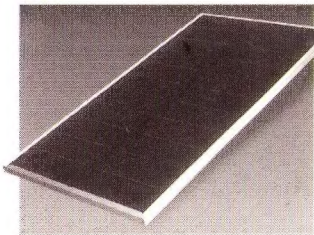
 **Organic Garden Advice And More . . .**

Solar Power at Home and on the Move From

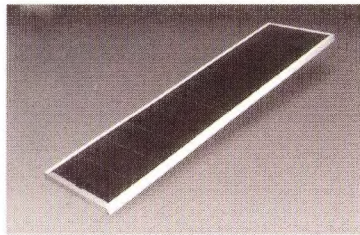
Canon & UNI-SOLAR®

Solar panels by Canon and US-based United Solar Systems Corp., a joint venture company between Canon and Energy Conversion Devices Inc.

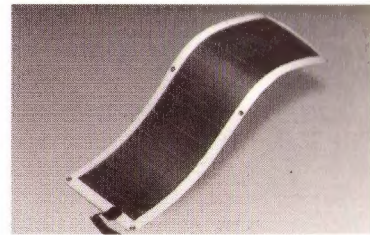
US-64



US-32



USF-11



Features:

- Latest amorphous silicon triple junction technology
- Cells made on a continuous roll of stainless steel
- Non-glass construction
- Rigid modules constructed with coated Galvalume steel backplate and encapsulated with UV stabilised polymers
- Flexible modules available
- Flexible modules polymer encapsulated & bonded to cushioned vinyl backing material
- Bypass diodes across each cell
- Rigid modules UL Certified

Benefits:

- Higher efficiency & output. Excellent high temperature performance
- Unique, flexible, lightweight cell
- Unbreakable
- Exceptionally durable, rugged and lightweight
- Able to be fitted to curved surfaces. Ideal for boats, campers & portable applications
- Unbreakable, durable, no sharp edges
- Shadow tolerant. Produce power even when partially shaded
- Qualify with stringent specifications

SPECIFICATIONS:

RIGID FRAME MODULE

Model	US-64	US-42	US-32	US-21	US-11	US-5	US-3
Rated Power (Wp)	64.0	42.0	32.0	21.0	10.3	5.0	2.68
Vmp (V)	16.5	16.5	16.5	16.5	16.5	16.5	16.5
Imp (A)	3.88	2.54	1.94	1.27	0.62	0.30	0.33
Voc (V)	23.8	23.8	23.8	23.8	23.8	23.8	12.0
Isc (A)	4.80	3.17	2.40	1.59	0.78	0.37	0.4
Length (mm)	1,366.1	928.3	1,366.1	928.2	491	491	286
Width (mm)	741.2	741.2	382.7	382.7	383	205	205
Depth (mm)	31.8	31.8	31.8	31.8	22	22	22
Weight (kg)	9.17	6.27	4.8	2.99	1.63	1.13	0.77

FLEXIBLE MODULE

Model	USF-32	USF-11	USF-5
Rated Power (Wp)	32.0	11	5.00
Vmp (V)	16.5	16.5	16.5
Imp (A)	1.94	0.62	0.30
Voc (V)	23.8	23.8	23.8
Isc (A)	2.4	0.78	0.37
Length (mm)	1,429.4	553.79	553.79
Width (mm)	424.4	424.4	246.6
Depth (mm)	5.02	5.02	5.02
Weight (kg)	2.14	0.91	0.54

Applications:

RAPS (Remote Area Power Systems)
Telecommunications, Telemetry
Recreational vehicles, Boats
Electric Fence charging
Battery maintenance
Outdoor lighting
Water pumping

ALL MODULES ARE EX STOCK NOW!!

Please contact Canon for your nearest dealer or for a brochure. Dealer enquiries welcome in selected areas.

CANON AUSTRALIA PTY LTD, SOLAR POWER PRODUCTS,

1 Thomas Holt Drive NORTH RYDE NSW 2113 Direct Tel: (02) 9805 2076 Fax: (02) 9805 2066

Front Cover: **Gleaning!** *Earth Garden* co-publisher, Judith Gray, harvests roadside apples from a tree on the old railway reserve at Trentham in central Victoria. See John Peacock's article on gleaning in this issue, to learn how to supplement your household budget with free fruit and other produce.

Photograph by Sandy Scheltema.

— SELF SUFFICIENCY AND PLANET CARE —
EARTH GARDEN
 — FOR BUSH OR CITY ALTERNATIVES —

Number 104
June - August 1998

Back Cover: Bill and Hennie Neve built a big bed on wheels for their beautiful bushland home in Gariwerd (the Grampians) in western Victoria. For six months of the year they simply wheel it out onto the patio next to their pond. They get to see the stars and, as a bonus, catch the birds coming in to drink in the early morning. Learn about how they protected their bushland forever in the article in this issue. Photograph by Dr Barry Trill.

EcoTax: This edition's EcoTax will go to the Native Forest Network's campaign to help save the oldgrowth Alpine ash forest at Mother Cummings Peak in the Western Tiers of northern Tasmania. This patch of forest on the Tiers has never seen an axe, is interspersed with King Billy pines and delicate sphagnum moss beds, and is being subjected to clearfell logging and woodchipping. The blockaders need support, and donations or support can be made through NFN, PO Box 301 Deloraine, Tasmania, 7304; phone (03) 6369 5102.

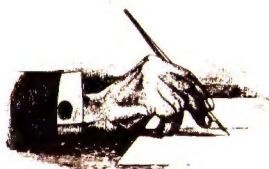


**Far From The
 Madding Crowd . . . 3**

Log homes come to Oz . . . 28

by Michael Uniacke

**Earth People
 Write . . . 4**



Cat Awareness Sign . . . 30

What's Your Problem? . . . 31

with Bob Rich



Bush Telegraph . . . 8

Fruit for the gleaning . . . 12

by John Peacock



**Grafting – Help your
 plants get together . . . 34**

by Allen Gilbert



**Jillaroo
 Farm Hints . . . 16**

Edited by Jill Redwood

**Strawbale Building
 In South Australia . . . 37**

A career that wriggles . . . 38

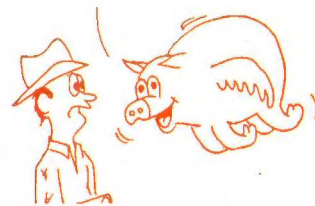
by Carole Pickering

Permaculture in Hindsight . . . 18

by Bruce Hedge

**Is this a roof
 I see before me? . . . 41**

by Dave Brown



Protecting Your Bushland Forever . . . 20

by Barry Trill

**Tropical Vegie
 Abundance . . . 23**

**Season
 By Season . . . 24**

by Jackie French



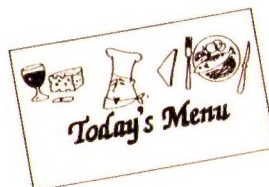
**With Your Own Hands: Owner
 Builder Picture Spread . . . 44**

*Photography by Narelle Chellew
 and Doug Falconer*

**CONTENTS continues
 on page 2 . . .**



**Questions &
Answers . . . 46**
with Jackie French



**From Spade
To Blade . . . 64**
by Gary Thomas

These are a few of my favourite choux . . . 50
by Keith Smith

Home Power Troubleshooting . . . 68
with Gary Davy

In My Tropical Garden . . . 52
by Liz Sinnamon

Solar not nuclear for Kakadu . . . 70
by Alan T Gray

Earth Garden Reviews . . . 74
Edited by Judith Gray

**At Least
We've Started . . . 54**
by Michael Uniacke



Build a mudbrick beehive oven . . . 56
by Andrew Hogarth

Natural Health News . . . 78

Get on your goat . . . 59
by Ann Cliff

Earth Garden UNCLASSIFIEDS . . . 79



**Killing weeds
with water . . . 62**

LAND LINES . . . 83

EARTH GARDEN BOOKS . . . 88

PUBLISHED BY: Alan T. & Judith K. Gray
EDITOR: Alan T. Gray
ADVERTISING MANAGER: Doug Falconer
email: earthads@kyneton.net.au
OFFICE MANAGER: Karen Sandow
email: earthmag@kyneton.net.au
SUB-EDITOR: Michael Uniacke
GRAPHIC DESIGN: Tony Fuery
BOOK ORDER ROUSEABOUT: Shelley Sandow
CLERICAL ASSISTANT: Linda Wheeler
ILLUSTRATOR: Helena Anderson
CARTOONIST: John Allison



Founded by Keith & Irene Smith, 1972.

EARTHGARDEN is Australia's original journal of self sufficiency and alternatives. It is a forum of practical ideas, shared knowledge, sources and a guide to alternatives to high-consumption lifestyles.

It's about putting a roof over your head, growing your own food organically, aiming for appropriate, renewable home energy systems and surviving — and thriving — in the city or the bush, with the inner changes which follow when you're in harmony with Nature.

Ecotax: each issue we donate a portion of the cover price to a community group involved in tree planting or conservation projects to help balance the use of the partly recycled paper used for printing *Earth Garden*. We would like to see all publishers pay an EcoTax.

Earth Garden is printed on paper made from plantation-grown timber.

Earth Garden is a member of the Audit Bureau of Circulations.

Our World Wide Web page is on the Internet at: <http://www.earthlink.com.au/earthgarden>

Contributions to *Earth Garden* are welcome — sharing information and experiences with other readers strengthens the network of Earth Gardeners. Photos, illustrations and diagrams are important. Please write first with your story idea. Remember subscribers are sustainers — for subscription details see page 88.

We welcome advertisements appropriate to the aims and ideals of *Earth Garden*, but reserve the right to refuse ads at our discretion. Contact us for display rates.

Printed by Industrial Printing & Publishing, 122 Dover St, Richmond, Victoria, thanks to Albie, Geoff, Jimmy, Malcolm & crew.

Distributed to newsagents by Gordon & Gotch Ltd, Melbourne & Auckland.

©1998 by EARTH GARDEN, RMB 427, Trentham, Vic, 3458. Fax: (03) 5424 1743.

e-mail: earthmag@kyneton.net.au
(We don't have the resources to staff telephone enquiries: please write or fax.)



Beyond the Bitumen

Dear readers,

Welcome to the Winter issue of *Earth Garden*. We've had a superb Autumn in this neck of the woods, and it followed a dry but productive Summer. This may sound strange, given that it's been one of our driest — and most dangerous — seasons. Dangerous, because the awful bushfire that swept past Trentham on 22 March was a devastating reminder that, along with southern California and the south of France, our part of the world is the most bushfire-prone on the planet.

The Trentham bushfire was a frightening shock to our community, and especially for the townsfolk, who were without power for most of the fire, and couldn't listen to radio updates. Some people were very unlucky, and lost their homes or holiday homes. Others were miraculously lucky because water bombers diverted the fire after it had destroyed their gardens. Many properties around Trentham are black and charred right to the front door, but because the houses were bombed with water by helicopters, the dwellings survived.

We were among the extremely lucky ones. The fire started about three km north of our house, and was fanned by a strong wind from the north-west. If the wind had come from due north, we probably would have lost everything. As it was, we were at the Jabiluka blockade in Kakadu during the fire, with Harry and Bertie uncomfortable with chickenpox, and we didn't know about the fire until three days afterwards. Thank you very much to all the concerned readers who sent us messages after the fire asking if we were alright, and thank you to all the people who sent messages of support after hearing of our involvement in the Jabiluka blockade. An article about the blockade appears elsewhere in this issue.

I said earlier that we also had a productive Summer. We managed a huge crop of apricots, apples and pears this year, and Bertie often had stewed apricots and oats for lunch — fresh from the tree. We don't have enough fruit trees for largescale juicing such as Jill Redwood manages (see her apple juicing story in the previous issue), but we have enough to get a buzz from wandering into our little orchard, picking a fresh apple, nashi or pear and munching it on the spot. Planting the trees that make your apples and apricots is exquisitely satisfying — as many Earth Gardeners already know, and as many others will one day discover.

We have a wacky duck among our flock of Muscovys at the moment. She's like the little white duck out of the movie *Babe*. Every morning she flies out of the duck run onto the roof outside our upstairs bed-

room balcony, and between the railings we often see her orange, scaly feet waddling along towards our bedroom, before she peaks in for a look at us lying in bed. She happily wanders around the roof, then once she's satisfied her curiosity for the day, she flies back into the run to rejoin the others or for her daily swim in the bathtub. The personalities of our backyard animals are extraordinarily different, but she's the first duck we've ever had who peeks in our bedroom window.

We all slept under mozzie nets well into Autumn this year, and our clearing seemed to attract plenty of mice to the compost heap, and in their wake, copperhead snakes to the mice. We knew when the season had changed from Summer to Autumn — the mice moved inside, the air smelled different, and the owls started calling in the forest.

Judith actually got used to finding the copperhead wiggling about the garden, but it's still a bit disconcerting — especially with babies and small children pottering about. Our friend, Barry Traill, caught one copperhead and released it in the bush but after that we seemed to work out a way to co-exist with the snakes — we don't bother them, and they don't bother us. I heard a local muttering, "The only good snake's a dead snake," which I find a bit upsetting, because they're protected native fauna that have more right to live in the bush than we do. In fact, 90 per cent of snake bites occur when people are trying to kill snakes — if left alone they wouldn't need to bite as many humans!

Coexisting with — rather than dominating — other elements of Nature. This seems such a simple concept but I wonder if we've really yet learnt to adopt the idea. Recently I even had a financial win from being a little closer to our backyard cycle of Nature. A year ago I lost a very good quality watch. I searched for it everywhere and couldn't bring myself to buy another the same, because I had a funny idea that the old one was still around — somewhere (plus I don't like the idea of spending heaps of money on a time-piece!).

Well, the watch was still around. Harry and Judith found it in the compost heap as they were emptying a barrowload onto the vegie garden, and I couldn't help thinking that it was a rather spectacular example of the value of composting, rather than mindlessly throwing everything into a wheelie bin to go to the tip!

I hope you get to enjoy a little co-existence with Nature this Winter, some of the articles in this issue may help.

Happy reading,

Alan.



Earth People Write is an open forum. The views expressed in letters from readers do not necessarily reflect the opinions of *Earth Garden*. Letters are always welcome, but please keep them concise.

No information is a turkey

Dear Alan,

In July 1997 my friends acquired a young turkey, which was proudly named 'DCD' (Dee's Christmas Dinner). It was obviously going to be fattened up and was to join us at, actually on, the Christmas dinner table. However, a few days before Christmas, love prevailed, and some months later 'DCD' has been renamed 'Lucky'. 'Lucky' has now been joined by 'Olive' — a birthday present from me to my friend Dee, and to get rid of the girls' frustrations, Dee presented her husband with 'Popeye' for his birthday. The three turkeys get on extremely well together and have also made friends with Dee and Rob's ducks and chooks.

However, while all is well in the chook/duck/turkey house, all is not well in the Dee and Rob house. Neither myself nor they have been able to obtain any books, or any reading matter regarding turkeys. We have searched the local Nambour, Noosa and Gympie libraries, and have asked people supposedly in the know, but they don't. Can you recommend a good book on keeping backyard turkeys and breeding them? Could you do an article about it? If you recommend a book, can you state where one could obtain it from and a RRP? I am not referring to full-on farming of turkeys, just a few in the backyard.

Any help you can offer would be greatly appreciated.

Karen M Lord, Cooroy, Qld.

Dear Karen,

Sometimes I think 'Earth Garden' has covered absolutely everything, then a letter like yours comes along! EG has published information on chooks, cows, donkeys, goats, ants, and even birds and bees, but turkeys? Perhaps you can try the Agricultural de-

partment in Queensland — it might be able to refer you on. We'll certainly keep in mind an article on turkeys.

—Alan.

Looking for a new community

Dear folk,

I am a 40-year-old fit and healthy single mum with three children aged three, eight and 13. I've come to the conclusion that mainstream Western society does not work, and I wish to explore alternative communities in 1998.

I want to be part of a community of spiritually aware (not religious) people who are committed to personal growth and well-being, where my children and I would be part of an extended family or tribe. (I'm not into any mind-altering drugs.) Ideally this community would have access to a beach, river or lake, alternative education for my children, and plenty of support services and opportunities for developing our potential. (It might be involved with LETSsystem.) I'm not so fussed about power or living standards. I want to get back to basics and live a simple lifestyle with personal freedom and responsibility.

I also need advice on education options for the boys, especially whilst travelling, because it could take a while to find the right community. I'm planning to spend up to 12 months exploring. (I have my own car and caravan.) I own my own home on about an acre in a small country town. I'm looking for an honest, reliable and responsible person(s) who may wish to lease the property for 12 months minimum, with perhaps an opportunity to purchase after that.

Anyone who can offer me constructive advice, ideas, and encouragement, please write to me. Wishing you all life's best,

Julie Gyles, c/- Post Office, Dunolly, Vic, 3472.

Which Maryborough?

Dear Earth Garden,

We were excited to find in EG 101 (page 69) an advertisement for an event which we could attend — the Energy Expo at Maryborough! We saw the 03 phone number, but thought the organisers were in Victoria, and we knew where Maryborough was. After over two hours driving, we arrived there to find there was no Princes Park, and no Energy Expo there. It was so disappointing! We made the best of it by going to sniff the sea breezes at Harvey Bay, and it was only when we got home that we located the other Maryborough, in Victoria. Please, could you ask your advertisers to describe the 'where' of their attractions more accurately? We hope that such attractions will come to Queensland.

On the positive side, we read and keep our EGs. We have just moved here from New South Wales into a sunny spot, and are making a solar box cooker from Marian McCain's recipe of March 1994 ('Cooking with the sun', EG 87, page 18), as well as preparing a hill pasture to become a food forest. Many thanks for a great magazine!

Martin Pedder, Maleny, Qld.

Finished the worm farm, selling the house

Dear EG,

Well I've just started building my reed bed and plunge pool, and my hands are so sore I can hardly hold the pen. It's been a year of tranquillity here in the hills. The slow-growing permaculture garden has been transformed to biodynamic splendour. I'm having a few troubles keeping grubs out of the tomatoes, but that's the biggest problem I've got! Although I now have to sell the place, this is not as big a setback as you may imagine. Without change one cannot grow, and as we Earth Gardeners know, growth is

the name of the game! I have bought a Kombi and intend to go WWOOFing. Any-one out there want a ten-year organic, alter-native 32-year-old WWOOFER? My house and land are for sale — contact me for details.

Enough of the advertising — I really wanted to tell you about a good idea for a worm farm I just built. It's in a bath tub, one of those old iron ones lying around in a paddock somewhere. They're great. Simply fill 'em up with mulch, earth compost with straw in the bottom for drainage, all that stuff worms love, and worms of course. Put it up on stumps, place a bucket under the drain hole, and hey presto, liquid fertiliser! Plant droopy things like eggplant in the top. Simple. Well, WWOOF WWOOF from the dog and bye from me. Peace, love and light. **Dave, Lot 9 Bald Mtn Rd, Limpinwood, NSW, 2484.**

PS: Thanks for your years of excellent reading. Write on!

Circulate this story

Dear Alan,

Thank you for an excellent magazine; every article is worthwhile reading. I would like to make a special comment about your article, 'Lumbering the children of the forest' in EG 101 (page 48). I was deeply moved, and suggest you condense it slightly and submit it to all the women's magazines of Australia. I feel that people need to know that this wonderful commitment and hard-ship is being endured to save our forests. If this type of article is not circulated to the unconverted out there, then it is not being fully utilised. I think such articles are very relevant to the future of our country, and could have a broader appreciation if the circulation was wider. Thanks again for the wonderful mag!

Sarita Benade, Buderim, Qld.

Are you there, Ms or Mr T?

Dear EG,

Would T Stevens (age 9), Echuca, Vic, whose letter was published in EPW ('Leave trees alone', EG 102, page 6) write to me with postal address. She or he may learn of something to their advantage.

John E Guest, 7/202 Denham St, Rockhampton, 4700.

Cat-astrophe awareness signs

Dear nature and animal lover,

Whether you love them or hate them, cats are causing an enormous problem to many in the community. Our friendly do-

mestic cat is a major reason for the decline of our small native animals and birds. I have long been concerned at the loss of these animals and birds, so my friend, Lex Metcalf and myself have designed and produced a sign for householders to display in their yards. Costs have been kept to a minimum; one sign is \$5, two to nine signs, \$4.50 each, and ten or more signs, \$4 each. The 'cat awareness' sign measures 225 mm by 270 mm, the background is white with a black cat, red circle and line, and the bird is green. We need plenty of support to make people aware there is a cat problem. You can help by buying signs, advertising them, and informing people of the 'Companion Animals Act'.

Norma Webb, 7 Terry St, St Georges Basin, NSW, 2540.

Dear Norma,

See the picture of the Cat Sign and ordering details on page 30.

—Alan.

Tall blots on our landscape

Dear Alan,

Enclosed is my subscription. I really should have sent this years ago. I live in Victoria on the Mornington Peninsula at Arthurs Seat, which has now been destroyed by telephone towers and radio towers. There are seven of them and they are 40 metres tall. Our local shire council has ignored our calls for community consultation and has treated us like morons. The stress and anxiety this issue has caused residents cannot be underestimated. However, our enthusiasm hasn't waned. Residents have planted local native trees and shrubs, bringing our little community together. Next time readers are driving down the Mornington Peninsula freeway, or riding a bike in the area, look up. If you feel inclined, write to the shire council and complain about these blots on our State park landscape.

Greg Holding, Arthurs Seat, Vic.

Now I know about paper bricks

Dear Alan,

Thank you for printing my request for information regarding paper bricks. I have had more requests to share the information received, than letters with information. I would like to thank the gentleman from Watervale, South Australia, whose name I have forgotten. He actually told me all I wanted to know. I would like to thank Kylie Judd from the central coast of New South Wales. Please write again and give me your

address. There is a much easier way and I'd like you to have the information.

Margaret Vinson, 34 Revell St, Port Pirie, SA, 5540.

From Sydney to 95 forest acres

Dear Earth Garden,

Well we finally have done it! We sold our house in smog-, crime- and noise-bound Sydney, and bought a property in the bush. This beautiful place is known as 'Twin Falls' and is some 95 acres of mainly forest near Ellenborough, New South Wales. We are blessed with a waterfall and spring-fed creek! Beautiful bird life is everywhere, and we are setting up a solar-power system supplied by the Rainbow Power Company. This will help make the diesel generator redundant (it will just be for top up charges or for back-up). Just to make sure we don't get bored(!), we are also making several vegie gardens and building a bridge to make access into the place a little easier. Glad to see you guys have a Web site which by coincidence is what we do! It complements a great mag! Best regards to all,

Ian, Yolanda and Melissa Strawbridge, Ellenborough, NSW.

Self-sufficiency without animal products?

Dear Earth Garden,

My family and I are vegans. This is easy at the moment because the supermarket sells soy milk, soy cheese, soy yoghurt and tofu ice cream. But subsistency is another thing. Could anyone recommend any books on self-sufficiency that does not incorporate any animal products, including household products?

A Scarbello, 224 Welling Dr, Mt Annan, NSW, 2567.

Don't judge PC on one person's version

Dear Earth Garden,

In answer to R Roe ('Permaculture not always the answer', EPW, EG 101, page 7), doubt is a human reaction to any process we do not understand, and in some cases is totally justified. As to the viability of permaculture, I must disagree because the viability of a system or process is only as good as the person left to caretake it. The examples you have given in EG 101 may or may not be shining examples of a permaculture design. Essentially, permaculture is the sum total of all those involved in it, and as such your participation

in a positive way may benefit the system. Permaculture has three main ethics: Care for the Earth; care for people; and reduce consumption. This will sustain diversity of all life on Earth, and make a positive contribution to conservation, community and an ailing planet.

One person's version of permaculture is no basis to judge it. To do so one would have to study it, and as a permaculturist, share the result. This will advance the ethics, principles and the aims of a movement that does try not to sit on its hands but looks and moves forward in the hope of a better world for us all.

B J Dalglish, Cert Perm Design, Boddington, WA.

Advice on Steiner education

Dear Earth Garden,

Thank you for a wonderful and inspirational magazine. I have been a reader for several years now, and recently became a subscriber — it's great to get *Earth Garden* in my letter box and not have to hang around the newsagent waiting for it to arrive. My goal is to have a little block of land to live on and practise permaculture principles. That's a bit further down the track, but I am gathering ideas and knowledge, and I know it will happen some day. I have a two-year-old daughter, and have been looking into Steiner education for her. I would appreciate hearing from anyone who has experienced this method, particularly in northern New South Wales because that is where I'm hoping we will eventually live. Peace and good wishes to all Earth Gardeners.

Tracey Anderson, 83 Cavendish Road, Coorparoo, Qld, 4151.

Organics in the tropics

Dear Earth Garden,

I live near Innisfail, in far north Queensland, where the climate is wet and tropical. I am trying to grow wing beans on a commercial basis on a small acreage. I have been on my property for ten years and have not used herbicides or pesticides. I started growing the beans last year and had no problems. This year the bugs found me. The local farmers are mainly banana and cane growers who favour poisons, and think I am just a little strange wanting to grow organically. I have found your book *Organic Gardening in Tropical Climates* by Liz Sinnamon and the *Australian Organic Growers Handbook* by Keith Smith at our local library, and would like to have copies of my own. Do you have these books for sale?

Could anyone recommend any other books on pest control, companion planting and herbs which would be suitable for our climate?

Bev Lawrie, PO Box 123, Miriwinni, Qld, 4871.

Dear Bev,

Check the order form on page 88. You can order 'Organic Growing in Tropical Climates', and there are many other books you might find helpful, and you can order those that interest you. We're posting you the 'Good Life' book club catalogue. You can use it to order Keith Smith's 'Australian Organic Gardener's Handbook'. In this catalogue are also numerous other books that might appeal to you. Good luck with your beans, and good on you for resisting the use of chemicals.

—Alan.

Strawbale house on the way

Hi,

Ron and I have been buying *Earth Garden* for almost a year, and we still fight over who gets to read it first. I picked up our first copy not long after we bought our block in Chittering, Western Australia. I hoped it might inspire Ron into helping me build a veggie garden. Well *Earth Garden* has done more than that. In a few short months Ron had our old gravel pit full of sawdust, old newspapers, leaves and anything else that will compost. We are planning to become semi-self-sufficient, with the help of Jackie French.

We are waiting for our strawbale house plans to be passed. I have all your back issues dealing with strawbale constructions. Last week we saw our first strawbale house; it was not finished, but it gave us better insight into our own home. We would love to hear from any of your readers that can give us some advice.

I noticed in your last magazine that you would like to hear from people who do not have a television. Ron and I have been without television for over six years, much to the amazement of our friends. It has given us more freedom to explore our surroundings and to entertain friends. We would both be willing to participate in a survey on people who don't have television. Thank you for an informative magazine.

Ron Witt and Fleur Crowe, 23 Squire Ave, Heathridge, WA, 6027.

Dear Fleur and Ron,

Keep up the good work! We now have

more than 120 families registered for our research into TV-free families. We are considering how to design the best questionnaire and hope to mail it out later this year. Meanwhile, any more TV-free families are welcome to register.

—Alan.

This retirement idyll

Dear Alan and Judith,

Congratulations on the index. It is quite a few years since I wrote. I have an article in EG 50. I still have a good veggie garden, but had to give my bees away after my son had a dangerous allergic reaction. My husband retired four-and-a-half years ago, and we have two on-site caravans. One is in a civilised park, and the other is beside the water in a 'fishing camp'. We also have two boats, a tinnie we use for crabbing and fishing, and a half-cabin which doesn't get used much as the weather hasn't been much good for ages, and after further spinal surgery I can't take rough seas. River and estuary fishing and crabbing is rather disappointing most of the time because the pros have descended in great numbers and net everything in sight — rather frustrating!

It is so peaceful in our fishing camp, except for sandflies and mozzies. We only cook on a camp fire, and don't have electricity. Our shower is an 18-gallon keg painted black with a shower rose on the bottom. We pump hot and cold water into it with a little 12-volt pump run off the ute. There is a very old and rickety drop dunny maintained by the local council. No, we don't have to resort to newspaper! I have a small gas fridge but we also take ice in a large esky and go home to Biloela when it runs out.

I am lucky to have good neighbours on both sides. They turn on my hoses which have timers, and feed my two remaining chooks, neither of which lay anymore. I haven't got the heart to get rid of them, because my 82-year-old neighbour loves them too much.

At last we have had some rain, and it is amazing how quickly the grass greens up. There is parkland across the road, so I'm not really shut in. There are plenty of birds abound and everyone here loves them. Cheers to you all.

Chelmer Roots, Biloela, Qld.

Dear Chelmer,

What a lovely, relaxing life! All that fishing sounds like paradise — my boys would love it. Perhaps the pros will move on soon. EG 50 is out of print, but our office

copy revealed your story and herbal remedies. It's great to hear from you again.

—Alan.

EG people in NZ?

Dear Earth Garden,

Thanks for an inspiring magazine. We only discovered it in our local bookshop a year ago, and now look forward to each issue which we read cover to cover straight away. It appears there are many *Earth Garden* people in Australia. What about New Zealand? We live in Coromandel, and would like to hear from other New Zealanders who are trying to do something different from the rat race. We are looking for a block of land, and would like to build a strawbale house. If anyone wants to write with a few comments, please do. Again, thanks for a great mag.

Sharon Evans, PO Box 100, Coromandel, New Zealand.

Planning wind power

Dear editor,

Thanks for your great magazine. For the past four years I have been looking forward to buying the next new edition of the magazine. It's great reading, and very helpful for a retired city person now living in the bush.

I live on a two-acre block with no running water or electricity. The one luxury I have is a phone. The electricity I need is generated by a petrol-powered small generator running into a set of batteries. This setup is a bit expensive to operate. Is there any information out there which describes a wind turbine using a modified car generator or alternator?

All help greatly appreciated.

J Blume, ph (06) 6266 3546; fax (06) 6266 3652.

Dear J Blume,

The last issue (EG 103) has a special feature on wind power, and describes how many people set up systems. These might give you some ideas. Good luck with your efforts.

—Alan.

Oz, I'm coming back

Dear everybody,

Just a quick note to redirect my mail. I wrote and told you I was heading overseas for three years, but I can't stay away from Oz for that long so I'm coming back. The address you've been sending my *Earth Garden* to has been Cheshire, UK. Travelling is

great, but I want to grow vegies and have babies and so on, so I am at a constant tug-of-war with myself. And of course you can't buy land if you're spending all your cash on hotel rooms. I miss my own kitchen with all the odds-n-ends for interesting meals in the pantry. I have adapted quite well — living over a camp fire for two months in Mexico taught me how to cook tasty meals in only one pot, and how to keep a fire going with wet wood and no kindling. However it is hard being vegetarian on the road if you want variety in your diet, and I did get a bit sick of beans, rice and tortillas after four months in Mexico.

On my way back I am going to South India where it's vegie-friendly. I've met a bit of the Green culture on my travels. There was a permaculture farm in Mexico, but I couldn't get in touch with the owner to go and have a look.

I spent a weekend on a commune in the countryside just north of London. The people were trying permaculture and were proud of being self-sufficient in organic apples, apple juice and honey. On the whole, though, you have to dig deep to find the organic types in England. I'm fed up with all my 'long-lost relatives' thinking I'm a freak by not eating meat, and as for recycling, conservation and organics — well I may as well come from another planet as far as they're concerned. Northern California is quite 'liberated' in places, though. Love,
Jayne Evans, Tuart Hill, WA.

PC improves our garden

Dear Earth Garden,

I am writing to renew my subscription for one year. The last issue we received was EG 100. Your magazine is by far the best on the market, and should be considered the Bible of self-sufficiency.

My fiancé and I have recently left the smog and pollution of Sydney, and now rent a beautiful five-acre property near Pomona, Queensland.

While in Sydney we did a trial run on permaculture; what a joke. We have since returned to a low-maintenance companion-planted organic vegie garden, which provides more food than we can eat. I must admit though our garden has improved somewhat with some of the permaculture principles put to use.

I always look forward to the articles in 'Permaculture Hindsight'. Anyway I've got to go, got some digging to do.

Scott Elliott and Ingrid Peter, Tewantin, Qld.

Woodturning using greenwood

Dear Earth Garden readers,

Can anyone help me? I am interested in the art of traditional Celtic and English woodturning using greenwood on the pole lathe and 'chair-bodging'.

Greenwood turning is more environmentally sound than woodturning on the electric lathe, because it requires only muscle power, and uses fresh green wood which produces shavings that can be used on and around the garden.

It does not create a fine dust like other lathes, and the greenwood is much easier to turn. The 'waste' it leaves can easily be recycled. I would be interested to hear from anyone who has information on its background or history, any plan or knowledge of how I could make one, and where I would be able to get the necessary tools.

A Gallahan, 25 Bligh St, Northbridge, NSW, 2063.

Dear A Gallahan,

We hope to publish an article on this subject later this year.

—Alan.

Reuse and recycle

Dear Alan and Earth Gardeners,

We are all asked to recycle all kinds of items. The business world is starting to realise that their goods and packaging are polluting their world. Many are being told they need to clean up, and rightfully so too!

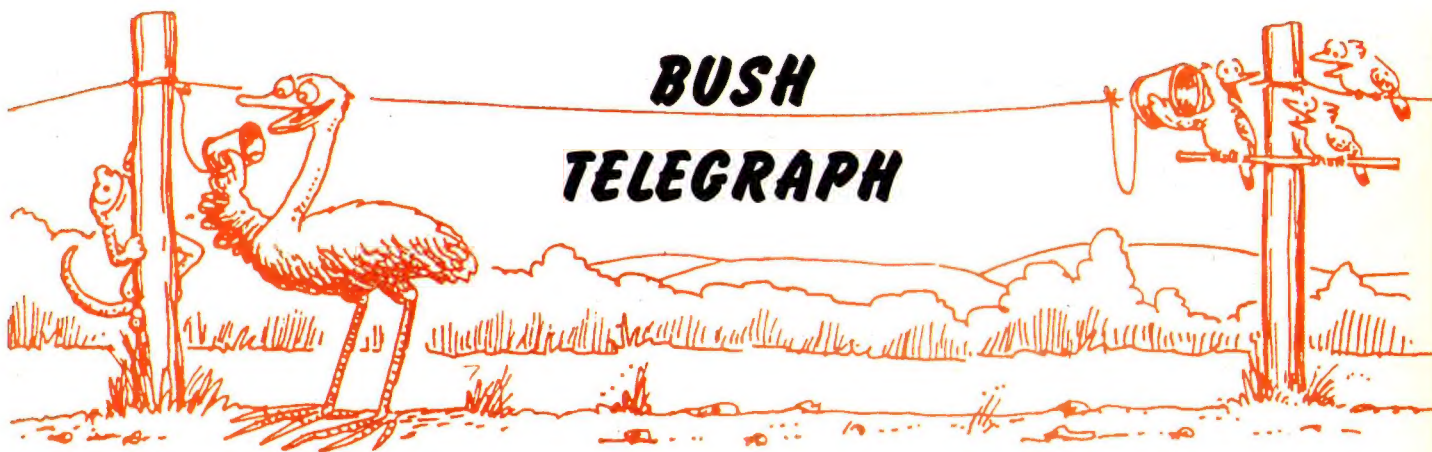
I've been busy making blacksmithing tools and utensils out of old bed bits, and terrarium tools and utensils out of old spoons and forks. I've made a bird aviary and garden tool shed out of old steel bed frames and scavenged cladding along with recycled timber, and even a chook house out of a disused corrugated tank.

We've used old cement double troughs for a bath for water plants and yabbies. We use as much plant life as possible to scrounge for our mulching purposes. We have a very poor soil to feed. So, we are trying to do our part as much as is possible. Maybe other Earth Gardeners can tell us of their reuse and recycle ideas too.

I'm sure there's a lot to share and learn from each other — sharing is caring! Thank you for a good mag. Keep us ever learning and those pages turning.

B Marschner, Port Germein, SA.

• *Earth People Write continues on page 74*



BUSH TELEGRAPH

Any news items which may interest Earth Gardeners may be submitted to *Bush Telegraph*. Please send notice of meetings, festivals and gatherings well in advance of the events.

Dry Stone Walling Weekend

Stonemason and dry waller, Huntly Barton, of Kyneton in Central Victoria, will run more weekend workshops on drystone walling, after a successful weekend in April: some Earth Gardeners even attended from interstate. The next workshop will be on 20 and 21 June. The workshops begin at a stoneyard in Kyneton. Huntly speaks about the history of drystone walling, and explains construction techniques. Next is a tour of historic and new walls. Sunday is for hands-on experience in drystone wall building. Ring Huntly on (03) 5423 4184 (AH).

Melbourne's Country Living Show

The Weekly Times Country Living Show is getting better each year, and again promises to be a great chance for Earth Gardeners to share information. *Earth Garden* will have a stall with a great range of books, and the chance to win a \$1000 library of country living books from 'The Good Life' Book Club. There will be guest speakers, and the Show will be held (undercover) from 10 to 12 July at Caulfield Racecourse. For inquiries phone (03) 5983 2400.

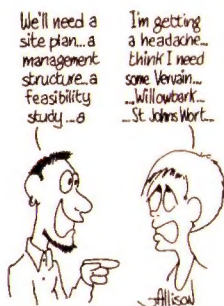
Rainbow Region Herbal Hub?

Australia's burgeoning herbal medicine industry could soon have its own home with an ambitious plan to build a research, development and commercial production centre at Lismore in northern New South Wales. The project is the brainchild of Lismore's Southern Cross University's Dean of Graduate College and Research Professor Peter Baverstock, who said it could bring millions of dollars in investment and create many jobs in the Northern Rivers region.

The project — called Cellulose Valley, after California's Silicone Valley and

in recognition that cellulose is a compound common to all plants — has received strong support from the herbal medicine industry, natural cosmetic manufacturers as well as State and federal authorities. Professor Baverstock said land next to Southern Cross University has been set aside for the 'technology park' with the next step being to get a site plan, management structure and a feasibility study into natural plant primary production.

"Of all herbal medicines consumed in Australia, only five per cent are grown here. Ninety-five per cent of that figure comes from the Northern Rivers region, making it the natural site for Cellulose Valley," he said.



'The Good Life' Strikes A Chord

Earth Garden's new book club⁴ 'The Good Life', is proving extremely successful, according to editor, Alan T Gray. "We've been surprised and delighted that so many readers have written to say how much they like the range of books in our first catalogue." Mr Gray said that *Earth Garden* subscribers are automatically given free membership to the book club. "We've increased the number of pages in each issue of EG that we can devote to articles, because we've transferred the former book pages into the book club catalogue. We've

greatly expanded the old book list in the club catalogue, and the next one will be sent out with the Spring issue of *Earth Garden*, featuring many new and interesting sustainable-living titles," he said.

Ford installs solar power in UK

Car maker, Ford has recently installed solar-electric panels at its Brigend, South Wales, engine plant. "If it works well we'll consider it at other sites," said a company spokeswoman. The \$2.2 million solar panel project is the largest of its kind at any manufacturing site in Europe and will cover 25,000 square metres of roof space. Ford estimates that the south-facing panels will reduce the amount of carbon dioxide that would have been discharged into the atmosphere by a coal-fired power station at over 4,000 tonnes during the panels' 30 year lifespan. Worldwide use of solar power is expanding by around 15 percent a year.

Solar Skyscraper

The new 20-floor, 95-metre tall headquarters of Kyocera Corporation, in Kyoto, Japan, has the world's largest solar power system along a vertical wall, the company said recently. The building has 1,392 solar panels along the exterior side and 504 on its rooftop, and is due for completion in mid-1998.

Bees, snakes top 'most lethal' list

The common honey bee is killing more people in Australia than Australia's deadliest snake — the eastern brown snake. Between 1979 and 1995, 40 Australians died after being bitten by a snake and 41 deaths were caused by bee or wasp stings, of which almost all were caused by bees,

according to the Australian Venom Research Unit at Melbourne University. Snake-bite deaths are declining, but deaths by bee stinging are increasing. Between 1960 and 1970, bees killed fewer than one person a year, but they are now killing almost three people a year.

Patrick Honan, keeper in charge of invertebrates at the Melbourne Zoo, says most of the bee-sting deaths were inflicted on beekeepers or their families and people with allergies. He said the problem with bees was that people often did not know they were allergic until they were bitten. There have not yet been any deaths from European wasps in Australia, though there may have been a couple of deaths from native wasps, Honan says.

Final Indulgence — Coffins to die for

The Tasmanian women who brought Australia wildly artistic coffins are at it again. This time it's clean, Green and a first for Australia. Final Indulgence has recently been appointed nationwide-wide agents for the Eco-Coffin, an innovative and inexpensive alternative.

Out of the ordinary coffin manufacturers, Kim Eastman and Susie Aulich Croll, say the cartonboard Eco-Coffin represents a breakthrough in consumer control, expression of individuality and freedom of choice within the funeral industry as well as being environmentally friendly.

Says Susie, "Many people express concern about the environmental impact of synthetic glues, lacquers and preservatives used in traditional coffin manufacture. The Eco-Coffin is a cartonboard product made from recycled materials, starch based glue and plantation grown wood fibres, so no valuable timber is going up in smoke. It's clean, Green and fits with Tasmania's image of developing industries and products to service that market."

Along with its environmental benefits goes a small price tag—The Eco-Coffin retails as low as \$300-\$350 depending on the model—which makes it a very attractive and affordable alternative to conventional coffins. The Eco-Coffins will be available through funeral directors or can be purchased direct from Final Indulgence, who can send them flat-packed anywhere in Australia. "We're promoting this coffin because we feel it sends a long overdue message to the community that says reclaim your right to become more involved in funeral arrangements for your self or

your family. You don't have to spend a lot of money to make your coffin personal, meaningful and environmentally friendly to boot and you certainly don't have to wait until you're dead," says Kim.

The two women say they have had enormous public interest in their product. "We recently showed some decorated Eco-Coffins, one painted by Aboriginal artists and one covered in fake leopard skin fur, at a Launceston event and we were bowled over by the response!" says Susie. "People are definitely seeking an alternative to conventional coffins and the affordability, versatility and 'Green' benefits of the product really strike a chord." (More information on the Eco-Coffin can be obtained from the Web site: www.tascraft.com.au/FI/)



Nuke clean-up bill \$75 million

Britain's failure to address the problem of nuclear waste is storing up a 30 billion pound clean-up bill for future generations of taxpayers, a report by two scientists says.

"Unreliable costs estimates and inadequate funding arrangements for UK civil nuclear liabilities are likely to mean that our grandchildren are faced with a massive bill for dealing with radioactive waste and decommissioning," said the report by Mike Sadnicki and Gordon MacKerron of the University of Sussex. The total estimated cost of dealing with the problems of radioactive waste, spent reactor fuel and redundant nuclear plants is put at 42 billion stg, most of which will fall upon the shoulders of future taxpayers because of inadequate provisions; the report from the Science Policy Research Unit (SPRU) said.

Green Power: NSW Has World's Largest Program

Electricity retailers involved in NSW Green Power programs have now announced investments in renewable energy projects totalling \$26 million, with over 70 million kilowatthours of sales to contestable customers, and more than 15,000 domestic customers signing up to the schemes.

US Green Power Schemes

Across the United States, a growing number of utilities are kicking off Green pricing programs under which customers pay a premium for power generated by environmentally friendly technologies. At least 35 utilities have recently started Green pricing programs. They are dishing up photovoltaic panels, wind turbines and biomass generation in Arizona, California, Colorado, Hawaii, Florida, Wisconsin and even Texas.

Recent national surveys show 50 to 80 percent of respondents willing to pay a premium to protect the environment or support renewable electricity, according to the National Energy Laboratory, an arm of the US Department of Energy. "Only about one to three percent of utility customers are currently participating in Green-pricing programs but that is because they are not used to thinking about where their electricity comes from," said a Laboratory spokesperson. "Over time there could be a 10 percent participation," he added.

On March 31 California phased out regulated monopolies and opened its retail electricity market to competition. Green power is big business in California, where upwards of 16 percent of the State's energy comes from renewable sources (mainly hydro), compared to seven percent nationwide.

Italian electric cars

The Italian Cabinet has approved a draft law offering incentives to town councils that encourage the use of electric cars. "The measure, which aims to limit atmospheric and noise pollution in urban areas, foresees incentives to city councils with more than 25,000 inhabitants for the gradual replacement of traditionally-propelled vehicles by electric cars," Prime Minister Romano Prodi's office said in a recent statement. The statement said more than 200 billion lire (\$109.9 million) would be allocated to the initiative over 15 years.

Vietnamese anti-drug therapy

UN officials have announced the funding of a study into a promising Vietnamese herbal anti-drug therapy, which may offer a cheap and effective way to treat addiction. The \$400,000 project, which ultimately could expand to include clinical trials in the United States, will examine the potential of Heantos, a blend of 13 plants found in abundance in Vietnam. In a two-year study in Vietnam, 95 percent of the more than 300 heroin

addicts treated with Heantos remained drug-free. The first phase of the project would verify the safety and efficacy of the treatment. The second phase would establish the procedures for co-operation between the Vietnamese and American institutions involved with the project, including Johns Hopkins University.

If these two phases of the project are successful, later phases could include clinical trials among up to 200 patients in the United States. Officials say the treatment offers the possibility of a cost-effective alternative to Methadone. A typical course of treatment with Heantos, which consists of taking the medicine in a liquid form for three to five days and then taking the medicine in capsule form for one to six months to prevent recidivism, costs only \$70.

Friends of Mallacoota Write

The Second Nature Writing Competition co-ordinated by the Friends of Mallacoota, is now open. The competition aims to encourage knowledge of, appreciation of and respect for the natural environment through prose or poetry. Entries will be expected to convey enthusiasm for natural phenomena in an interesting, amusing evocative, powerful or personal way. 1500 words of poetry or prose on the subject of nature, adult (over 18) prize \$200, youth (under 18) prize \$75. Entry \$2, deadline July 31, 1998. For entry form send SASE to June Drake, Nature Writing Comp, c/- Post Office, Mallacoota, 3892.

Answering Myths About Aborigines

As a matter of fact is an important, new, 72 page book for people wanting to understand indigenous issues. It will help non-indigenous people understand the history and present situation of Aboriginal and Torres Strait Islander people, and hopes to help achieve a more informed public debate.

Gatjil Djerrkura is the Chairman of ATSIC (the Aboriginal and Torres Strait Islander Commission), who published the book. He says: "During the past 15 months, I have been struck by the amount of goodwill that most other Australians have towards Aboriginal and Torres Strait Islander people. This goodwill is often matched by a need for factual information about the experiences of indigenous people over the past 200 years, and about our current situation."

Each section of the book starts with one of the common misconceptions or resentments about Aboriginal and Torres Strait

Islander people or government programs of assistance. It then presents facts and figures, and interpretations from an indigenous perspective, to show why these perceptions are in fact 'myths'. It has sections on history, funding, ATSIC, specific programs, land and social attitudes. The book is available for \$9.95 a copy (including postage and handling) via National Mailing and Marketing on (02) 6299 6703 or by mail from: PO Box 7077, Canberra Mail Exchange, ACT, 2610.



Major Solar Power Station Opens At Singleton

The Southern Hemisphere's largest solar power station — at Singleton, near Newcastle — was opened on 23 March this year, and its operators aim to double its output. The Singleton installation cost almost \$2 million and was partly financed by the NSW Government's Sustainable Energy Development Authority (SEDA). The solar panels were manufactured at Villawood in Sydney's West by Solarex Ltd and the inverters (which convert the output into grid-compatible electricity) were manufactured in NSW and Victoria. The solar power farm will feed electricity into the grid as part of SEDA's Green Power renewable energy scheme. Such schemes are now offered by all six NSW distributors and are proving to be a great success. Subscribers choose to pay extra to ensure a proportion of their power comes from renewable sources. So far, 15,000 households and 8,000 businesses have signed up to the various Green Power schemes. The Singleton solar power station will produce 250 megawatt-hours of electricity, enough to provide solar power to 3,000 Pure Energy customers. It will also save 250 tonnes of Greenhouse gas emissions each year.

In another milestone for 'Green energy' in NSW, a major solar power station

at Dubbo's Western Plain Zoo was also announced in March. The half-million dollar installation is being built by Advance Energy with the support of SEDA. The solar farm will save 100 tonnes of Greenhouse gas emissions a year. It will power a kiosk and information centre at the zoo, with any overrun being fed to Advance Energy's customers. The farm will consist of 720 photovoltaic panels, producing 100 megawatt-hours of electricity annually.

Did Australia 'Hoodwink' world at Kyoto?

Australia was accused after the Kyoto Climate Change conference of "hoodwinking" the world into giving it an easily achievable Greenhouse gas emission target. Environmental groups said Australia's target of eight percent emissions growth by around 2010 would require little change in the way the country's energy sector works and, as such, was "extraordinarily lax". Australia had scored an enormous victory when it convinced the rest of the developed world to include the effects of land clearance in Greenhouse gas emission calculations, the Australia Institute, an independent environmental think-tank, said.

"Basically, the Australians have hoodwinked (the international community) and when they find out that in fact Australia won't have to do anything then they are going to be pretty upset," Executive Director Clive Hamilton said. "I think Australia is going to have a few battles on its hands to maintain its position."

Under the new global accord, struck in the Japanese city of Kyoto, most developed countries have agreed to cut emissions to eight percent below 1990 levels by 2008-2012. Australia, which had argued for an 18 percent increase in emissions, was one of only three nations which were allowed to increase their emissions. Canberra had threatened to walk away from the treaty negotiations unless it was given concessions for its "unique" position, arguing that agreeing to a compulsory uniform target would lead to the loss of more than 100,000 jobs here. But the inclusion of the land clearing clause meant Canberra would sign the treaty not only happily, but enthusiastically.

"It's an outcome that will protect tens of thousands of Australian jobs and it's also importantly an outcome that will put the world on a further path to controlling Greenhouse gas emission targets," Prime Minister John Howard said at the time. But

Hamilton said Australia's part in the agreement was a farce, because the land clearance clause meant it could meet its target without doing anything.

Senator Brown Freed — Greens Celebrate Forest Victory

The charge of 'obstructing lawful logging' against Australian Greens Senator Bob Brown (arising from the Goolengook blockade of oldgrowth forests in East Gippsland) was dismissed in the Moe Magistrates Court on 27 February, nine months after the Senator was arrested. An article on page 48 of EG 101 describes Senator Brown's involvement in the blockade.

After two days of hearings in Moe, the magistrate said he doubted the logging operation was lawful. Senator Brown said he was both elated and angry. "In effect the court has found the very first coupe of forest woodchipped under Mr Howard's East Gippsland Regional Forest Agreement (RFA) last year was destroyed illegally," Senator Bob Brown said outside the court after his acquittal.

"The ink from Mr Howard's and Mr Kennett's pens was not dry on their rotten agreement before they sent in the chain saws with no legal or ethical right. They should be in the dock, not me. The case puts a cloud over the whole RFA process by which the Howard Government is handing total control of woodchipping of wild forests to the States.

"Since my arrest an RFA has been signed with Tasmania and the Central Highlands of Victoria and another is imminent for Western Australia.

"The logging at Goolengook is an outrage. They invaded the Goolengook Heritage River protected area which has higher protection status than a national park. The logging is against a specific Act of the Victorian Parliament.

"The damage can never be undone. All logging should stop immediately while they sort out this mess," concluded Senator Brown. More than 160 protesters have so far been arrested at Goolengook. Senator Brown later released legal advice about the implications for logging in East Gippsland, following the decision by Magistrate Dugdale to dismiss the charge against the Senator and award costs of \$35,000.

The legal advice was that the implications of Senator Brown's case "for logging in East Gippsland are serious and inescapable". The Heritage Rivers Act makes tim-

ber harvesting unlawful within 200 metres of a heritage river like the Goolengook River. Senator Brown, and others, were arrested at a clearfell logging coupe within 100 metres of the river. The Act also renders void any subsequent agreements or instruments (such as the despicable Regional Forest Agreement). The barrister who successfully defended Senator Brown (Brian Walters) concludes some marvellous work for wild forests by stating that "the logging of forests in East Gippsland should cease immediately until (its) lawful basis is established." Well done Brian Walters and Bob Brown!

The next phase of this legal battle took place on 9 April when the Victorian Government passed legislation to retrospectively validate logging within 100 metres of heritage rivers. The amendments made their illegal logging legal, and nullify the 200 metre buffer zones provided by the original Heritage Rivers Act. Senator Brown and 160 other blockaders must now await an appeal by the government against the senator's acquittal. Brian Walters accused the State Government of "interfering in the judicial process".



Herbarium moves to Brisbane Botanic Gardens

The new \$4.3M Queensland Herbarium building at the Brisbane Botanic Gardens at suburban Mt Coot-tha has been built. The new building will hold an irreplaceable collection of approximately 600,000 dried plant specimens including 150 collected by Sir Joseph Banks and Daniel Solander during Captain Cook's voyage up the East Coast of Australia in 1770. This is the world's most comprehensive collection of tropical Australian plant specimens and has a replacement value exceeding \$25M. Around 30,000 specimens are on loan at any one time to botanists in about 150 scientific institutions worldwide. Brisbane Botanic Gardens Curator, Mr Ross McKinnon says: "Relocation of the Herbarium to the Botanic Gardens will further

enhance the national and international profile of Queensland's premier Botanic Gardens and provide a better service and experience to the 800,000 people who visit the Gardens each year". Chief Botanist, Dr Gordon Gymer says: "The herbarium is Queensland's nerve centre for botanic information and research on our flora. Its databases allow ready access to information by land managers, consultants, researchers, government and general public and it is also the lead agency for documenting Queensland's plant bio-diversity for vegetation survey and mapping and research on rare and threatened plant species".

Pressing For A Bright Olive Future

The Central Victorian city of Bendigo is soon to get its own olive press.

The boutique-size commercial press will operate in the city's Mayfair industrial estate. Peter Caird, owner and importer, said the press was a major step for his business which has leased and bought groves throughout the central region from Wedderburn to Harcourt.

"We will be buying all the olives people can bring us," Mr Caird said.

Growers with volumes of 50 kg or more will be able to get olives pressed, for a fee, and retain the oil.

According to Mr Caird, Victoria's only other olive press is near Horsham.

"There are lots of olives being planted around Bendigo," he said. "This year we estimate we will press 20 tonnes of olives from our own trees."

Talk of an olive industry in Bendigo has been building. It was spurred by the formation of a Central Victorian Olive Growers Association which has 107 members. A comprehensive study by consultant Paul Millar found the region had an ideal climate and soils for olive trees.

Association president John Plim told 45 people at the association's first meeting that while members had 5000 trees, there was potential for a further 45,000.

Mr Caird is banking on that potential. "We have six olive groves with trees ranging from 20 to 100 years in age," he said.

"Many were planted about 35 years ago when olive trees were displayed at the second Elmore Field Days. Olives were going to be the liquid gold of the times. Since then many have been neglected but we're tending to them again for production purposes."

—The Weekly Times

Fruit for the gleaning

The ancient Hebrew practice of gleaning can give you a great deal of fruit for little or nothing except exercise and a chance of meeting interesting locals.

John Peacock explains how it's done.

by John Peacock

New Norfolk, Tasmania.

THIS has been the best season in a long time for stone fruits. I have dried something like 200 kg of apricots for my family to eat in place of lollies, but I didn't pay a cent for them! Tomatoes, peaches, apples and blackberries will follow next season, and tropical fruits are always available. The secret lies in the ancient Hebrew practice of gleaning. This is how it works.

The local stone-fruit orchardist has to keep all fallen fruit away from the trees to avoid disease. I follow the pickers, and remove all fruit that is on the ground. The sound fruit I dry, and the damaged fruit I cook and store in the freezer for making pies and so on later in the year. The seed I plant on waste ground or out in isolated hedgerows

for later cropping. We take a picnic, and the whole family enjoys the time working outside. Because the orchardists are not paying cash, they make sure that we obtain all the sound fruit we need.

In the case of field tomatoes, we select all the damaged and left-over fruit only, and sometimes we have to pay a token fee. Apples are the best because there are so many feral trees. Whenever an apple core is thrown from a car window, there is the chance of a tree growing. To avoid lead poisoning, we do not pick beside busy roads. It is much more of an adventure to seek out bits of old roads that have been bypassed by new highways. Old maps are an interesting source, and the research skills learned are a valuable part of the children's education. The apple and pear trees located beside these disused roads are a rich source of fruit. Even if they are too small to eat, their juices supply pectin for setting jam and sweetener for bottled



John, with Sophie (13), Ruth (9), and Camille, collecting rosehips beside a river. Note the cut-away plastic two-litre milk bottles. Looped through belts, they store the picked fruit and leave the hands free.



This apple tree by the side of an old road may have sprouted from a core thrown from a passing car.

fruit. When we find a good tree, we go back in the Winter and do a little after-care with pruning and weeding.

Blackberries

Blackberries are everywhere. With rabbits and crows, they are part of the trinity of curses introduced by early settlers. They are good food, however, and free for the collecting. We find river and creek banks the best areas for blackberries, and the absolute best crop we ever picked was feeding from a damaged sewer at the back of an old folks' home. We didn't realise that until much later! We use cut-down two-litre plastic milk containers strung on our belts to leave our hands free for picking (see photograph). When these are full, we cut them down again, and stack them in the freezer.

All around the hills of Tasmania there are the remains of family smallfruit farms abandoned in some bygone market slump. Here we find gooseberries, blackcurrants, boysenberries, raspberries and so on. With a little care, many of these can be brought back into good production. Of course they all ultimately belong to someone, but a 'gift' of some fruit or a pie or two earns goodwill, and the old timers are often just glad to see the plants bearing again. They frequently become sources of good stories



Ruth and Camille collect apricots from an orchard. Back home, they throw out the bad ones, cook and bottle the good bits of slightly damaged fruit, and dry the sound fruit.

of the old days as the children get to know them.

Tropical fruits come from the corner shop. I have arrangements with several small shops; for a nominal charge I will take all the produce that no longer looks good on the shelf, or in exchange for fresh specialist produce from my garden. In this way I get to dry ripe bananas, juice mangoes and the like, and the wilted vegies go to the chooks, worms or compost heap.

Finally there are field mushrooms. We found some remote paddocks where cattle congregate and



NON-RADIOACTIVE



SMOKE DETECTOR

photoelectronic sensor / battery operated (included) /
interconnectable / insect screen / 5 year warranty /
led indicator/ test switch made by BRK
nuisance free!

IDEAL FOR THE ALTERNATIVE HOME

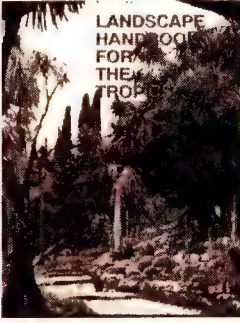
\$45 each
plus
\$4.50 post



Info/Orders:
3D LIGHTS
R.S.D. Goongerah,
Victoria, 3888
Ph. (03) 5154 0151

Also makers of low-voltage flouro lights and lamps

**Free Catalogue
of Books**



Such as *Landscape Handbook For The Tropics*-Design landscaping to take full advantage of a tropical paradise, comprehensive, covers - buildings, commercial and private landscaping. **\$126.50 (Postage Inc)**

Merry Hall

PO Box 92, Islington NSW 2296.
Write for Free Catalogue. MC / VISA / BC. Ph. 02 4969 4165
Fax. 02 4940 8579 www.ozemail.com.au/~merryhal

really wonderful mushrooms grow. The grazier receives some of what we pick, but one season I picked 30 fruit boxes full. Dried, they flavoured soups for many months afterwards.

Drying

How is all this drying done? There is not enough consistent sun where I live for sun drying, but in 1978 I bought an old upright clothes drying cabinet from the op shop. I dusted out all around the motor, drilled holes in the sides, and strung fence wire through to make shelf supports (Figure 1). On these I lay flywire-covered trays (Figure 2 and Figure 3) made from racking sticks thrown out by the local sawmill. Currently we have three of these going full time. Each type of produce has its own drying time, but the quickest and best is the most ripe. Apricots pecked by birds are better than shelf-ripened fruit picked early for appearances, for example.

Our electricity bills go up significantly at this time of year, but the cost is minuscule compared with whole food shop prices. We also have the additional benefit of outdoor exercise for all the family, and the opportunity to meet lots of very interesting people.

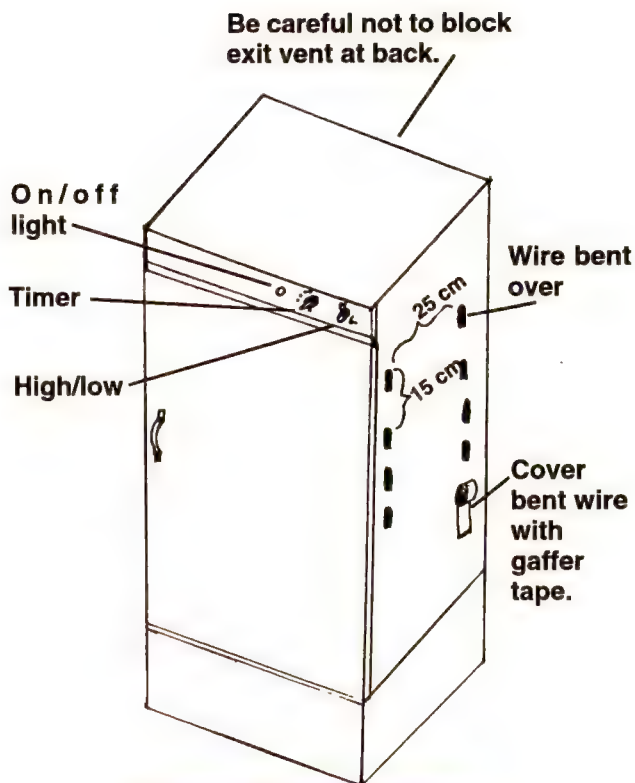


Figure 1: Drying cabinet

✓

Shock!

Shower Power actually works!

"...it really is a wonderful product that actually delivers its promises..."

"This product is miraculous! I have my two showers cleaned and shiny in a jiffy with little effort."

"It actually lives up to the claims made about it."

"...a big thank you for the results promised on the label."

"On a recent trip to Australia...I was so impressed with the product I brought a bottle of it back to the U.K. with me."

(Some of hundreds of unsolicited letters we've received)

Add sparkle to showers and tiles, screens, taps, benchtops... in fact all hard surfaces. It has a natural fragrance and best of all...

NO CHLORINE!



Surprise!

This Amazing BATHROOM CLEANER works in the KITCHEN too!

Available from most major supermarkets 100% AUSTRALIAN MADE AND OWNED.

NO MORE UNLOADING BY HAND!



STARKY TIPPING TRAILERS

- ◇ Simple winch and cable operation
- ◇ Over 1/2 tonne legal capacity
- ◇ Size 6'x4'x16" deep
- ◇ Removable top-hinged tailgate for dumping of load
- ◇ Removable check-chains for spreading of load
- ◇ Adjustable height winch mast
- ◇ Ducted wiring, tie rails, mudflaps
- ◇ Safety yellow colour with large tail-lights for better visibility

for more details, contact:

Gordon Stark
S.T. Trailers

**03 9792 9394
0418 329 706**

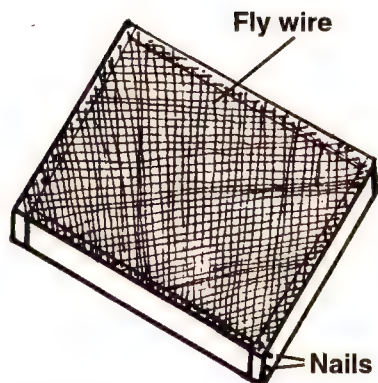


Figure 2: Drying trays

If you want to know the precise location of our gleaning activities, forget it! They are a closely guarded secret. But explore the area around your home. Australia is rich with foods of a very great variety just there for the picking. And I have not even mentioned the huge range of edible weeds and native plants.

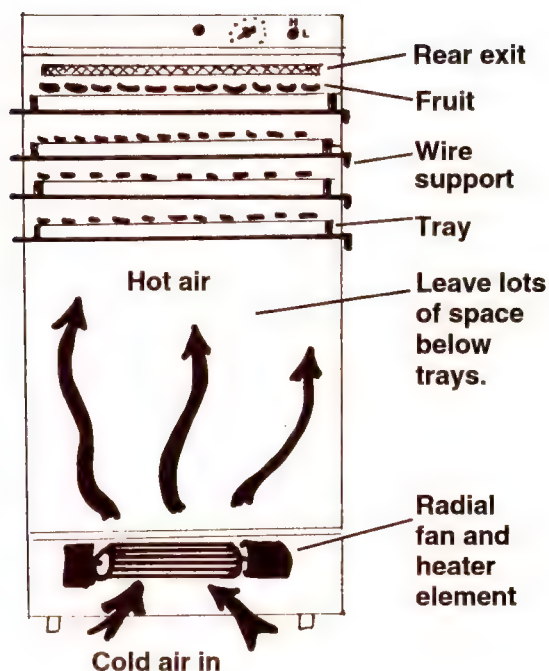


Figure 3: Inside the dryer

JURA SOL INDUSTRIES

Manufacturer of JURA SOL Solar Cookers
JURA SOL Solar Food Dehydrators and
JURA SOL Solar Beeswax Extractors



**SOLAR
COOKER**
from \$295



**SOLAR FOOD
DEHYDRATOR**
\$290

Prices
include
postage!

for more information, contact Ruth
Phone/Fax: (02) 6337 4104
"JURA HEIGHTS", Freemantle Road,
via Bathurst, NSW 2795
Email: jurasol@ix.net.au

Web page: <http://www.ix.net.au/~jurasol>

NULLARBOR FOREST TIMBER INDUSTRIES

for Recycled Timber!
~ Barry Donchi ~

Specialising in

- massive posts
- beams and lintels
- benchtop planks
- 250mm wide flooring and lining

- ◆ **IRONBARK**
- ◆ **BLACKBUTT**
- ◆ **RED MAHOGANY**
- ◆ **TALLOW WOOD**

We've moved!

**Recycled timber
sale.**

Great deals on large posts. Suited to mudbrick, stone and/or post and beam houses. Prices are very negotiable for larger quantities.

NO REASONABLE OFFER REFUSED

Delivery arranged anywhere in Australia.
Genuine enquiries only, please.



92 Graham Street (Hickey Drive),
Moama, NSW 2731
Ph (03) 5480 0044
Fax (03) 5480 0045
Postal: PO Box 106, Moama, 2731

Jillaroo Farm Hints

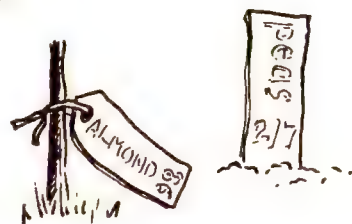
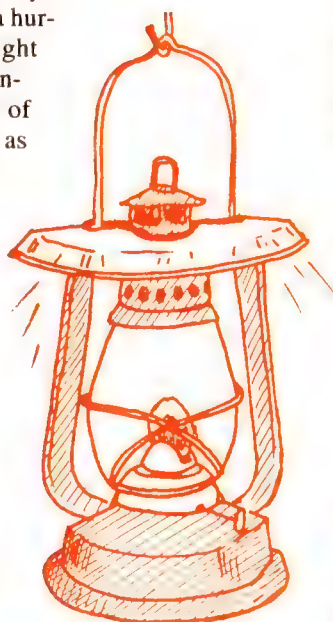
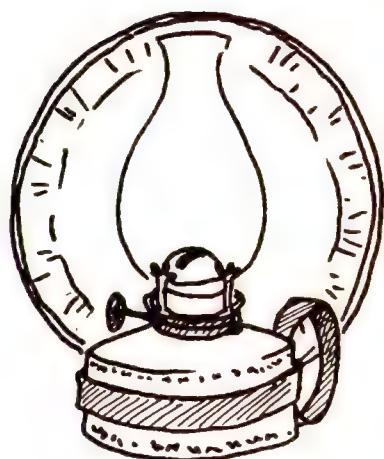
Edited by Jill Redwood

Jillaroo Farm Hints is a regular presentation of bush skills and farm tips. All readers are welcome to contribute. If you have any hints up your sleeve that you inherited from Granny or developed yourself, send them to Jill Redwood, RSD Goongerah, Victoria, 3888.



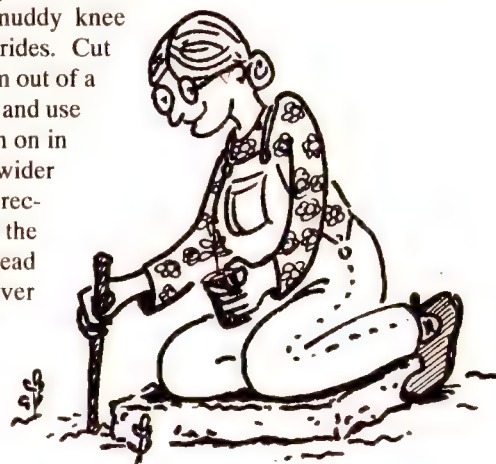
A reflection from packaging

Aluminium pie dishes can be recycled into a number of useful items. They make a handy reflector behind an oil lamp or a candle. Being soft, they bend to shape, and can be wired or taped to stay put. They also make a good top reflector over a hurricane lamp to shed more light downwards. Garden tags make another u-beaut use of these bits of packaging. Cut them to size as either ties or as labels for poking in the soil. Imprint the name of the plant, date and so on with a nail or dead biro.



Easy-kneesy

Kneeling down on wet, cold soil to do the Winter garden beds doesn't just compress the soil. It can also be a bit tough on the joints as well as leaving big muddy knee patches on the strides. Cut the side or bottom out of a polystyrene box, and use that to plop down on in the garden. The wider the square or rectangle of foam, the more it will spread your weight over the beds; the thicker it is, the longer it will last.



Removing a fence post

To remove a stubborn fence post, try chaining it low down, and pass the chain up over a sturdy piece of wood with a notch in the top. Hook it up to the tow bar or to the old draft horse if you have one handy.



Dé-pong the dog

It works for fridges, carpets, shoes and so on, so why not the dog? To de-pong your hound, dust bicarb soda into her or his coat, and brush out again.



of the blade, give it a good touch up with a file or use a grinder to put an edge on it. Don't overdo it though. A shovel only needs to go through earth, not boots.

And now from our readers...

Wood ash scourer

The glass on the inside of oven doors can become mighty blackened from baked-on oil and miscellaneous food splatters. Wood ash can be used to scour it off the glass.

Crunch the garlic

To peel garlic quickly, lay a large flat-bladed knife on its side over a clove of garlic, and press down until you hear it crack and crunch. You will find that the clove will just fall out of the skin.

—Lorna Freeguard, King River, WA.

Get your shovels looking sharp

There are some shovels that are sold with an edge on which you could ride to Sydney (or Perth if you happen to live in Sydney). Trying to cut through soil with a blunt shovel is like trying to cut through a pumpkin with the back of a butter knife. Sit it in a vice, and working from the back

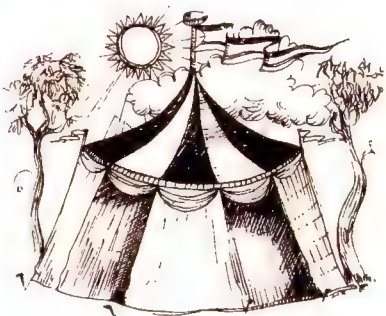
Not nice for mice

To block up mouse holes temporarily (say behind the wood stove or whatever), stuff the hole with old steel wool. Mice hate steel wool on their dentures!

—Nanny Hurren via Judith Gray.



Going Solar



Renewable Energy & Sustainable Living Fair

14th & 15th November, 1998.

Daylesford, Victoria.

- COMPREHENSIVE SEMINAR PROGRAM
- RENEWABLE ENERGY EQUIPMENT
- PROFESSIONAL ADVICE
- BUILDING DEMONSTRATIONS
- HOME POWERED BY SOLAR, WIND & HYDRO
- ENERGY AUDITING WORKSHOPS
- ENVIRONMENTAL ORGANISATIONS
- FAMILY & CHILDREN'S ACTIVITIES

FOR MORE DETAILS : Going Solar 322 Victoria St, North Melbourne 3051 Ph (03) 9328 4123
or Eco Emporium 406 Smith St, Collingwood 3066 Ph (03) 9415 1786

PERMACULTURE IN HINDSIGHT

It seemed like a good idea at the time

Even after all these years, Bruce finds there's still plenty to learn, such as how not to make mudbricks. And might European wasps actually be good for something?

by Bruce Hedge

Newham, Victoria.

THE big dry went on and on. Every day, we saw the dam go down another centimetre or two. That large dam we built before anything else was paying its way. We'd have enough water for this Summer — for the garden, the trees, and for the possibility of fire. And then, one day, the island wasn't an island anymore. A sea of mud had appeared between the island and the wall. Mud!

Hey, thinks I, here's an opportunity. We can always use more mudbricks around the place. We need a new woodshed, a machinery shelter, and a wall for the garden. Why not just make this mud into bricks, let them dry, and store them away until needed? Brilliant! I made 20 bricks in ten minutes and patted myself on the back. Fantastic! I

could come down as often as I liked and make more bricks as the water dropped with the exposed mud. The mud was all pre-mixed and pre-puddled. And of course, each brick made meant there'd be more water stored next year, because the dam would be deeper. I didn't bother putting straw or reinforcing in them, because we'd only used it in small amounts in the bricks we'd made for the house, and it was the same clay anyway, wasn't it?

Three hot Summer days later, they were dry, ready to stack and store. I went to lift one, and it fell apart in my hands. So did the second. So did the third. Then it dawned on me. I'd not made mudbricks at all. I'd made silt bricks from beautiful fine, settled, suspended mud-silt. The clay was much further down. It seemed like a good idea at the time. Perhaps if I had put straw or other binding agents in it, they may have stayed in one piece.



Bruce rehearses for his new B-grade horror film, 'The Monster from Mud Lagoon'.

The best-laid plans . . .

But all was not lost. Why not use all this wonderful, mineral-rich silt to add minerals to the garden? So I goes and gets my trusty Troy-Bilt rotary hoe to pulverise this stuff into a form I can load into a trailer or wheelbarrow. But the best-laid plans o' mice and men . . .

The hoe seemed to take a mind of his own. (There's nothing feminine about my rotary hoe.) The more I pulled one way, the more he dug a hole for himself. I sank into uncontrollable laughter as he sank further and further into deep, sticky, smothering, glorious mud. I'm sure I heard that bloody hoe laughing at me as it spluttered to a stop. Bugged! Way up over his wheels. Well anyway, we pulled him out with the car and a long rope, cleaned him off, and he started first pull. He's a good hoe.

We retired him to the shed until Spring, or even later, because this year's no-dig garden has been nothing short of sensational. I'll be tripling the no-dig area next year, and all we have to do now is get a dozen or so trailer loads of animal bedding for the mulch. I think water is the secret. It was watered heavily at least once a week, and I'm sure every worm within 100 metres found its way under the mulch. Thousands of wonderful worms!

Prolific

The European wasps have been particularly prolific this year. There are at least nine nests on our place alone, but three are under favourite fruit trees, so the old petrol-down-the-hole-after-dark trick is out of the question. In fact I haven't eliminated any of the nests because I don't know of an ecologically acceptable method, and I certainly don't want to use insecticide, even though it may be the least damaging or most localised method. Until a biological control is developed, I think it's fairly pointless to try to kill them by destroying nests, because there will always be countless nests we can't find.

And just a couple of observations which might throw a cat among the pigeons, so to speak. I've seen European wasps attack and remove white cabbage butterfly larvae (the green caterpillars) from my broccoli and cauliflower plants. Also, the windfall apples in the orchard disappear

very quickly indeed. The wasps are so voracious they reduce the fruit on the ground to skeletons within a couple of days of it falling. I'm fortunate in that I've never had codling moth in my apple orchard. But is it possible that the wasps break the codling moth's breeding cycle? I seem to remember chooks being used in apple orchards to clean up the windfalls and eat the larvae. Could wasps do the same? They've got to be good for something! When we finally get a wet Winter, their nests will become waterlogged, and they'll drown, especially the two nests below the high-water level in the dam wall.

Planters and gatherers

The harvest this year has revealed interesting household dynamics. We can rely on the kids to pop outside and gather fresh vegetables for immediate use, and of course there are salad greens and just-outside-the-back-door herbs. But the main harvest of fruit and vegetables is a different story.

It's not a passion of mine to actually go and reap what I've sown. I'll plant, establish, nurture, water, admire and protect the plants, but somehow the actual harvesting doesn't have an incredible pull on me, except if it's apples for cider. Fortunately, Alice complements this situation perfectly. She loves picking ripe fruit, gathering buckets of berries, and showing WWOOFERS where to dig for potatoes. I'll then happily pickle, freeze, or otherwise store the produce, and Alice will dry hundreds of apples for Winter. We've discovered we have different passions for different parts of the food production chain. It would be very awkward though, if neither of us liked planting, for instance.

Perhaps this is where communities have a big advantage over family groups. Each community would have its planters, establishers, harvesters, storers, composters and mulchers, all needed to keep the place going.

I suppose that's really what the world is like, isn't it? The exception is that I still like to know exactly where our food has come from, and I want to be a part of the production of that food. We Earth Gardeners are very fortunate indeed, aren't we?



**IF you want to save money, labour,
energy & the environment
DON'T build a single storey
Get our book plans first!**

With thousands of
satisfied customers
Australia-wide and
now overseas, our
book will surely
provoke your thinking.

Send \$16.50, which includes
postage, to:
Peter Lees, Architect & Builder,
RMB 4322, Daylesford, Vic. 3461
Phone 03 5348 7650
Mobile 019 136 998

40 photos, text, prices,
and plans of small to large
homes (or sheds, studios,
whatever). Unlimited
layout possibilities, catering
for mudbrick, rammed
earth, timber, stone or brick
and in particular the needs
of owner builders.



Spot the house: Bill and Hennie's house blends in with their bushland environment, with their solar-electric panels the only giveaway. Photograph by Bill Neve.

Protecting Your Bushland Forever

The Conservation Manager of Trust For Nature, Dr Barry Traill, describes how one couple protected their bushland forever with a conservation covenant on their land title.

by Dr Barry Traill

*Trust For Nature, Melbourne.**

YOU'VE moved to the country, you've built your home and garden, and you've loved, nurtured and protected the bushland around you. The wildlife has responded and friends and family enjoy the native animals that abound outside your window. But what will happen when you've gone to the great permaculture garden in the sky — or just the cottage garden and terrace in the city near the new job?

The land is sold to new owners of unknown attitude. Will a redneck buy your land for the ample wombat-shooting opportunities? Will the woodchippers be asked onto your land by a new cash-strapped owner with no love of trees? Will some idiot simply think it makes great grazing land for his goats?

Up until the past few years you've had no chance to protect your bushland forever but fortunately, new systems now allow you to do so. Conservation covenants have been available in Victoria since 1986 and can now be obtained in most other States. Essentially, a covenant sets out what can

and can't be done on a property. The covenant is placed on the title and is binding on all future owners. The conservation body organising the covenant visits the property periodically to check the covenant is being upheld.

Early covenantors

Two of the earliest 'covenantors' in Australia are Bill and Hennie Neve, who signed a covenant to protect their 33 hectares of bushland at the base of Gariwerd (the Grampians) in Western Victoria. I had the chance to visit the Neves on a wonderful late Summer's day recently and heard the story of their home and their fight to ensure that the bushland they love stays protected.

Visitors to the Neve's extraordinary property often focus on the house itself. Built of local stone and wood and Neve sweat, the house isn't so much on the edge of the gully as embedded into the hillside, like a luxurious hobbit hole.

The turf roof sprouts a mass of grasses and creepers which fall over the walls. From the gully, the only indication of the house is the windows facing the bushland, and solar panels sprouting from the soil of the roof.

Bill and Hennie are justly proud of their loving crea-

tion, but are insistent that people don't just focus on the building.

"The house is only part of it," says Bill. "Just as crucial is the wonderful bush and the wildlife that we wanted to have as part of our lives every day."

Sitting in their cool home on a late Summer's afternoon though, I find it hard not to concentrate on the fluid lines and wonderful craftsmanship of the home. Along the rounded walls of local hand-dug stone are interspersed massive redgum trunks. These were scavenged by the Neves from fallen trees in neighbours' paddocks. The original knot holes show, as well as the twirling tunnels where beetle larvae once worked away under the bark of the living trees. These pillars arch up to the ceiling of wooden slats which supports the roof of fire-proof soil. Everywhere in the house there is evidence of skilled and patient hands — superb lead glass windows, handmade hardwood tables, the view across the gully, framed just right by the full-length windows.

But Hennie soon points out the window, and focuses me on something very close to my zoologist's heart. Three gang-gang cockatoos come flying into the scent-bark tree standing just outside the window. They give their characteristic creaking calls and stare intently at us through the window from only three metres away. One at a time they



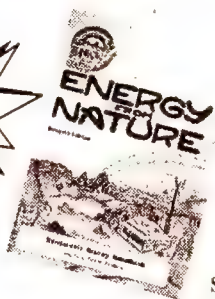
Hennie cuts up a pumpkin in her beautiful, handmade kitchen.
Photograph by Bill Neve.

drop down and sip carefully from the pond directly outside the window. I move closer and the male bird, with his comical curly pink head plume, tilts his head and sizes me up with a beady eye.

A few minutes later white-winged choughs arrive for a feed of grain sprinkled outside the window, some honeyeaters arrive to bathe, then a fantail flies past. Hennie points again down to the gully where an emu and a wallaby come to drink at the dam and eye each other a

This is The Book

for
Renewable Energy Technology



Written for
the layman!

Now you can
understand
solar, wind &
hydro power
supply systems.

Only \$20 Posted
Available from:

RAINBOW POWER COMPANY LTD

1 Alternative Way, Nimbin, NSW 2480

Ph: (02) 6689 1430

Fax: (02) 6689 1109

Email: rpcltd@nor.com.au

Web site: <http://www.rpc.com.au>

**Over 21,000
copies sold**



QUICK SPIN WOOL



Scoured and carded natural coloured and white wool tops. Plain dyed and blended shades of 22 micron merino silver blended with:

- ❖ alpaca
- ❖ cashmere
- ❖ camel
- ❖ flax
- ❖ kid mohair/silk
- ❖ kid mohair/silk/alpaca
- ❖ angora rabbit
- ❖ kid mohair
- ❖ alpaca/silk/camel/kid/mohair

All in delightful colour ranges. Quick to spin, economical, no waste and luxurious to wear. Yarns for weaving, knitting and dyeing. Earth Palette and Landscapes Dyes, Books, Ashford products, felting and quilting batts and tools. Craft workshop videos. Full sample range \$12 posted.

QUICK-SPIN WOOL (EG)

RMB 1215 Shelford Rd., Meredith, 3333

Fax or Phone: (03) 5286 8224.

CREDIT CARDS WELCOME.

little warily. The place is simply swarming with native birds and other beasts. To the Neves, this is their idea of heaven, and why they came here and built this special home in the bush.

Trust for Nature covenants

After building their house of stone, earth and redgum, the Neves' thoughts turned to ensuring the protection of their bird and animal life.

"We wanted a covenant to ensure the land and the birds will stay protected once we pass on," said Hennie. "So we negotiated a conservation covenant with Trust for Nature. The trigger for us was that a mining company wanted to explore in our wonderful valley. We got moving quickly, arranged a meeting with all the locals, organised a covenant for our block and encouraged our neighbours to do the same. Four now have them and many others are considering them."

The mining company got the message and backed off. The Neves also worked hard to successfully protect their valley from a planned multi-million dollar condominium that would have been stuck in the block next door.

The Neves are powerful proponents for more people taking out protective covenants for their properties. Says Bill, "We have just come back from travelling through regions of China and Indonesia, where birdlife was virtually non-existent. This is what Australia may end up like unless people are prepared to provide long-term protection for their bushland".

As with all covenants, the Neves' and their neigh-

bours' were negotiated to ensure the individual wishes and needs of the owners are provided for. Most covenants have clauses that prevent logging or clearing of bushland, prohibit cats, allow dogs under control and prevent further sub-division that would fragment the bushland. For blocks which have already been partly cleared a 'two tier' covenant can be arranged where stock are allowed in the paddock areas but kept out of the bush. On most covenants the owners wish to allow for a house and a garden area.

Before I left, Bill and Hennie took great delight in showing me their unique bedding system. Says Bill, "While building the house we often slept outside instead of in the campervan. I thought, why am I building a bedroom without stars on the ceiling?"

To solve this problem, Bill and Hennie built a big bed on wheels. For six months of the year they simply wheel it out onto the patio next to their pond. They get to see the stars and, as a bonus, catch the birds coming in to drink in the early morning.

"We saw 20 species of birds before we got up one morning. They were right next to the bed!" says Bill.

A great way to wake up and savour the bush and the wildlife they've protected forever.

• **For more information about obtaining a covenant contact Trust for Nature (Victoria). They can talk to you about covenants for Victoria and are happy to give you contact details for organisations in other States. Trust for Nature (Victoria) are at Level 2, 385 Little Lonsdale Street, Melbourne, Victoria, 3000; phone (03) 9670 9933 (or e-mail trustfornature@tfn.org.au).**



Remember the days when painting was safe and simple? Well times have changed and today we know that synthetic paint can be dangerous to your health. At Bio Products Australia we have the expertise to provide you with information why Natural Paint is better for your family and the environment. Natural Paint is made of chemicals found in food ingredients such as linseed oil and soya bean products, so, while it's not recommended you drink your natural paint, your health certainly won't be at risk. So, try our natural paints. To find out more

Phone us, FREE on 1800 809 448

and we'll mail you "Toxic Information" - FREE!

And please remember! All our products are better for you, and for your home environment. To know more about them, prices etc., simply contact us!

Bio Products Australia Pty. Ltd.,
25 Aldgate Terrace,
Bridgewater S.A. 5155





**SAVE the world
from your TOILET.**

~ With a Nature-Loo composting toilet, you don't waste WATER or cause pollution. And every time you go to the toilet, you do something good for the earth. Call (07) 3252 0733 now for a bleach FREE brochure.



It's only natural.

P.O. Box 1213 Milton Qld. 4064
EMAIL: natloo@powerup.com.au

Tropical Vegie Abundance

by Alan T Gray

Trentham, Victoria

IN TROPICAL parts of Australia the main vegie-growing season is well upon us. Some people find vegie-gardening difficult in tropical regions — partly because there aren't many good organic gardening books suitable for warmer climates, and southern texts tell people that December is a great time to plant sweet corn! *Organic Gardening In Tropical Climates*, written by popular *Earth Garden* columnist, Liz Sinnamon, is one such text that has helped many people.

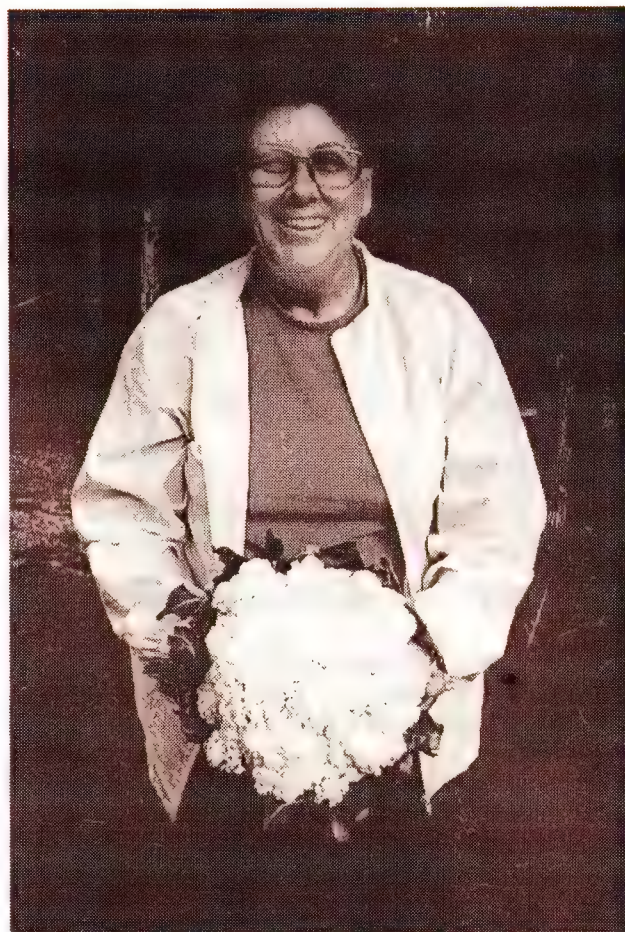
Wendy Baillie is a mad-keen organic gardener who lives at Ginger Beer Creek (what a great name!) near Gladstone in Queensland. She's also a member of the Port Curtis Organic Growers — a local group that meets about six to seven times a year ("It's too hot to meet in summer," she says).

In August 1997 Wendy won second prize in the vegie-growing section of the Gladstone Beautification Committee competition, and in 1996 she won the first prize.

Her three-quarter acre block — the size of three house blocks — is covered in a huge range of vegetable growing beds. Wendy plants her vegies between March and July/August, and manages to harvest fresh vegetables all year round. Naturally, she's a keen composter ("mainly to encourage earthworms," she says), and she only seems to encounter one problem gardening in such a warm climate.

"We get frosts in Winter, but only about one or two, so it's hard to prepare for them. But apart from that it's a great environment — I even have birds fly in each afternoon to eat the grubs," she says.

At the Growers meetings there are sometimes up to 40 people, and it's a great chance for members and friends to swap fresh produce. Well-known *Earth Garden* contributor, Jose Robinson, is a member and Wendy speaks very



Wendy Baillie with one of her prize-winning, organically-grown cauliflowers.

highly of Jose's knowledge and skill as an organic gardener.

"Jose once brought me a great load of seaweed for my garden from her island home — it was a wonderful boost for the soil."

Last September, Wendy held the monthly growers' meeting at her home.

"We boiled billies up and down the driveway and made damper — it was a wonderful day," she says.

It's quiet and unassuming organic gardeners like Wendy who make it a pleasure to be part of the organic growing movement.

"I've been into natural gardening for as long as I can remember," says Wendy.

• **People in the Gladstone region can join Port Curtis Organic Growers by contacting John Last, 28 Auckland St, Gladstone, Queensland, 4680.**



Season

by

Season



*Earth Garden's
regular saunter in
the garden, with
Australia's favourite
organic gardener*

Winter – A restful time

It's cold. The toilet seat is cold. The wombat droppings on the flat this morning all had white frost whiskers when we went down to feed the chooks. (They got eight apples with bad patches, there were two shrivelled peaches, last night's potato skins — Bryan doesn't like potato skin — stale bread and rather dry-looking leftover lasagna. I don't know how people cope without dustbin chooks. None of the above would have made decent compost.)

Pudge wombat was mooching round the early jonquils this afternoon, just after sun fell behind the ridge (which means it's about two-and-a-half hours before dusk). She heard me picking lemons, so she trotted over, giving her "oof oof oof" noise, which means, "Please feed me". (Each wombat I've known has had its own "Here I am — now food" noise. Ricki used to give a shrill "Geek!", and Fudge a sort of yip.)

So I poured her out a bowl of oats, and she snuffled in it happily, then fell asleep by the bowl. It's really the wrong time of day for a wombat to be out. But the Winter sun shouldn't hurt her, not down here in the valley, so I left her asleep and counted the camellia buds. I'll miss the wombats in Summer. These pale Winter afternoons are a perfect wombat time, with enough sun for warmth, without being dangerous.

It's lyrebird season again too. A lyrebird was dancing on the garden seat this morning, outside the kitchen window, warbling happily into the morning mist. I don't know if he was performing for the sheer joy of it, or for a hidden audience in the pittosporums, or as a warning dance to his reflection in the kitchen window. He may even have been dancing for us, the triumphant dance of a bird who has

just ripped up seven artichoke plants, leaving them in soft grey shreds.

I yelled at him. He went off, tail down and squawking into the loquat tree, then reconsidered, glared at me and pranced back onto the chair. He was still there when I'd finished my porridge.

Winter is a restful time. There are no bushfires to fear, no snakes coiling under the geraniums, and even if there is still no water in the creek, the air is softer and gentler. You don't feel the wind at the back of your neck sucking all the moisture from the world so it turns brown in an hour and crackles under your feet next morning.

For some reason I measure years from Winter to Winter, no matter what the calendar says. And this has been a hell of a year — the unexplained loss of my sister; a car accident; diverse political horrors; surgery, and the probable need for more; the creek shrinking between its banks until only the brown strings of algae are left; the trees and garden wilting, yellowing and browning; and the soft smoke of bushfire dusting through the valley while I gathered photo albums, computer disks and Edward's old toy wombat. Perhaps it is good, at least once every few years, to have to work out what you really value in your life. (And realise that they are people, places and animals, and not things you can stuff in a garbage bag.) Sometimes it seemed as though one tragedy dragged other tragedies along with it, so that every week there was another phone call, another loss, another terror.

But this is a time of rest, as though fate has decided that once you've picked all the Summer apples and made the plum jam, you should have a rest from other things as well. (And in the past year I've found picking up the fallen apples and making the jam — and watching the wombats eat — to be the most secure refuges of all.)

Winter luxuries

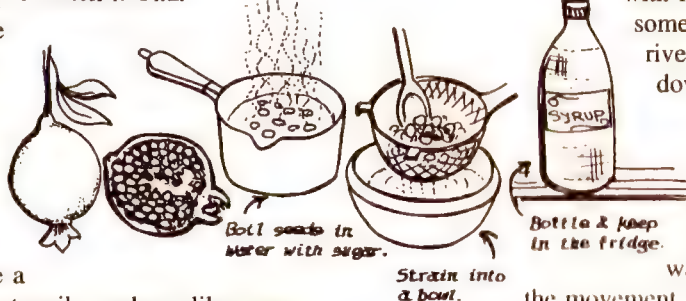
Winter is a time for luxuries. It's no accident that the greatest of traditional feasts is a Winter one, whatever you choose to call it. Last Summer we didn't feel like feasting. Hot bodies around a table don't like ingesting hotter food, but Winter is different. It is psychologically necessary to indulge yourself in Winter. It is as necessary a part of living with the seasons as is planting corn in Spring, or admiring the pomegranates in Autumn.

(By the way, pomegranate syrup is wonderful. Just stew the seeds and their jelly in water and sugar, then strain and keep in the fridge. It's good with iced water, like a tequila sunrise without the tequila, and use like cranberry jelly in cooking. A dollop is also good in orange juice or fruit punches. We only have two trees, and I've decided that our household needs at least four if we're to have enough syrup plus pomegranates to admire in the fruit bowl all Winter, plus enough left on the tree for the birds.) But back to necessary indulgences.

Doing nothing: This is the ultimate indulgence. In the West we usually waste 'doing nothing' time by watching television and reading the Sunday papers. This is not 'doing nothing'. It's doing something vaguely boring on the assumption that if it's boring it must be relaxing. The impulse (to totally turn off) is good. It's just the methods are counterproductive. They leave you enervated instead of energised.

The Japanese have a lovely ceremony of watching the cherry blossom open. You choose a day (the day) when the blossom is almost open, and then you sit below and watch it unfold. Okay, cherry blossom comes once a year, and most of us don't have cherry trees, or if we do, the bower birds eat the blossom, so this is a spell instead.

POMEGRANATE SYRUP



Boil seeds in water with sugar.

Strain into a bowl.

Bottle & keep in the fridge.

It's supposed to be a spell to cure sadness. I used it the first time after my grandmother died, and it is so . . . comforting isn't the right word . . . neither is Earthing or normalising. I don't think there is a word for what I mean, but I do it often. It's a way of deliberately relaxing, of taking in the world around you as well as letting go.

Take a flower of many petals such as a good fat rose or a chrysanthemum, or even a branch with lots of gum leaves on it. Find some natural running water, like a river, a creek or the sea. Throw down a petal, and watch it until it disappears. If you are using this as a spell for sadness, think a memory of the lost one while you watch it float away. If you're not, well, just watch it, the colour, the shape, the movement, the lap of the water, the shine as it shivers in the sun.

Then take another petal, and watch that twist on the water too. And when that is gone, throw another and another, until at the end of ten minutes or an hour there are no petals left. But I doubt you'll leap to your feet and hurry off regardless.

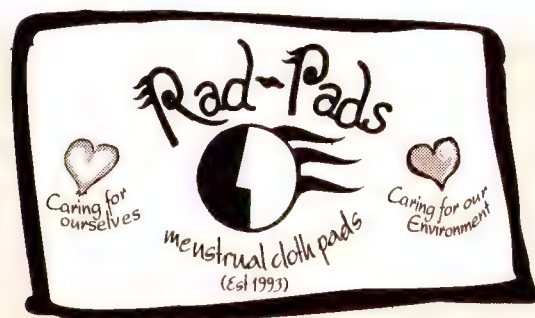
One of my favourite memories of my grandmother is of her just sitting, facing a blank wall. When I was a kid, I used to think this was odd, and I felt vaguely sorry for her.

(She had no-one to run off and play with.)

However more and more I find myself just sitting now — not with my face to a blank wall usually, but not really looking either, until suddenly you find you are watching, and every colour is clearer.

Rosemary potpourri for remembrance: This is a warming sort

of Winter potpourri, for anyone who keeps forgetting their car keys, the cat's name, or who just wants extra oomph to help concentrate at work. If you don't have the ingredients in your garden, you can buy them in the cooking or herbal tea section of the supermarket.



As seen in "Green Methods for Women — Part 1" in EG 91

Call or write for information or to order:

PO BOX 886, HAWTHORN, VIC, 3122

PH:03 9509 9539 (Credit Cards Welcome)

STRAW BALE BUILDING TECHNOLOGY

Australia's First Licensed Straw Bale Builders
Huff 'n' Puff Constructions Pty. Ltd. Lic # 80594C

Huff 'n' Puff is now providing the following services:

- Straw Bale Building Consulting Service
- Straw Bale Workshops
- Designs to Suit Straw Bales
- Council Applications
- Straw Bale Load Bearing Test Results.

For further information, see our strawbale website at:

<http://strawbale.archinet.com.au>

Or contact

Susan Wingate-Pearse and John Glassford on:

Ph (02) 4465 1624 Fax (02) 4465 1865

e-mail: huffnpuff@shoal.net.au

six parts dried rosemary leaves
 one part dried peppermint leaves
 one part dried cloves
 one part powdered cinnamon, or preferably, crumbled bark, and
 one part orris root or dried cistus leaves (if you don't have either, this is still good).

Mix in a bowl, and keep by your chair or on your desk. Sniff often.

Genuine orris root

This comes from the Florentine iris, and smells like Heaven probably smells, and the texture is glorious too — talcum powder to the nth. Specialist herb nurseries will sell you Florentine iris, but if you just want a fixative without the magic fragrance, dry and grind up the root of any bearded iris. But there is nothing like the real thing. We have a little sachet of it hanging from the front doorknob, so a whiff wafts through the house whenever anyone opens the door. We also have scatterings of the root through the bowls of old flower petals and herbs.

If I had enough orris root I'd use it as talcum powder, leave scrapings of it in all my cupboards, and use it for toothpaste. (It used to make quite a decent toothpaste — just add a little water. It's just rough enough to clean your fangs, but it was also supposed to whiten them too.)

An ancient rosemary aphrodisiac: (Well, I said Winter is a time for indulgence. Do not make this for children unless they are under the supervision of a really silly adult.)

Take dried rose and violet petals (remember to collect them in Summer); saffron (grow your own saffron); Autumn crocus (*Crocus edulis*); myrrh (gum from the myrrh tree, or substitute wattle gum); lavender flowers; and rosemary leaves. Mix with an equal quantity of dried viper's flesh. Try the red-bellied black snake, or your local poison-

ous reptile may do as well, but avoid the poison glands near the neck. Steep in honey.

I'm not sure whether you eat this or apply it. I'm not recommending this from personal use. And no, if you experiment I don't want to know about it.

How not to get a cold or flu

The best way not to get a cold is to (a) get enough sleep and (b) don't get cold. Yes, I know colds aren't really from the cold. They are caused by a virus, but if you get chilled you're less able to fight off the virus. Half-an-hour sitting in a draught or in the biting wind watching a football match without a good woollen beanie on your head is a great way to come down with a cold.

Also (c) walk half-an-hour a day in sunlight, preferably towards the sun, not with your back to it, and let the sun touch your skin. Dunno why, but recent research seems to indicate we have sensors in our skin that react to sunlight.

And (d) wash your hands rigorously before touching food or your eyes. Most colds and flu are transmitted from things infected folk have touched, not coughs and sneezes.

I know all these sound so easy they're not worth bothering with, but if you follow them through the dull-and-gloomy, lowered-resistance time of year, you will be much less likely to catch a cold or flu, and you are more likely to recover fast if you do.

If you do get a cold, have a long soothing massage, if possible for at least two hours. If you don't have a helpful masseur companion, have a hot bath or at least, a shower if you have one of those horrible modern baths that don't quite cover the appendages with warm water. Add a good dash of lavender oil if you have it too. The idea is to soothe yourself, so you totally relax.

Now go to bed, and stay there. If you have a sexy





"Happiest is he who hath the power to gather wisdom from a flower"

SUBSCRIBE NOW!

to the

Australian Herbal Connection Newsletter

The FIRST newsletter/magazine for the herb industry - for growers, manufacturers, practitioners and home growers. This is a bi-monthly publication.

The Australian Herbal Connection Network
 RMB 1135C, via Wodonga, Vic 3691

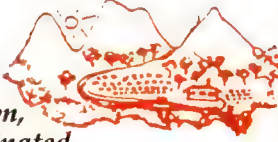
Freecall 1800 819565

Email: herbs@dragnet.com.au

Greenpatch Organic Seeds

100% Organically Grown, Non-Hybrid, Open Pollinated

350 varieties listed.





All seeds and plants
100% Grown in Australia.

A wide range of Vegetables, Flowers, Herbs, Natives and Exotics, Green Manures, Sprouting and Bulk Seeds.

ALSO - Books, Calendars, Videos, 100 varieties of Bare-rooted, Food, Herb, Aquatic and Permaculture plants.

For a comprehensive 1998-99 catalogue, send 4 X 45c stamps to:
Greenpatch Seeds, PO Box 1285, Taree, NSW, 2430.

companion, all the better. It'll help you sweat. Just don't be so inventive that you get chilled. Read all the light literature you can get your hands on. Watch silly television programs — the sillier the better, nothing that requires thought or creates Welt-schmerz. Don't take work to bed with you. It will be totally counterproductive. Drink something warm at least eight times a day, in other words, sip almost constantly. Lemon drinks are good. See cold (as in virus, not temperature) tea below.

Emerge only after your temperature goes down. If you don't you'll go down with another wog a few weeks later. Last century of course you'd go to the seaside or the mountains for a few weeks if you could afford it. They knew about convalescence then.

Emergency 'I don't have time to be sick' routine

Okay, you're run down, your head aches, you know you're coming down with the lurgy, and you just don't have time. Well, here's something drastic. Don't panic. Your temperature will go up. Don't try to keep hoping you're not really getting sick either. Go to the cupboard (which you will have stocked up beforehand) and take several garlic and echinacea tablets according to directions, and keep taking them for the next six days. Also take one gram of vitamin C, and take the same dose night and morning for the next three days.

Now have the hot bath or shower above — a good half-hour soak. Get into warm pyjamas or at least a sweat suit or t-shirt. Get into bed with a hot water bottle or electric blanket.

If you can have the massage recommended above, do so. If you can't — and the massage is definitely preferable — take a sleeping tablet prescribed by your doctor. (I said this was a drastic remedy. It is not something to be recommended often. In fact if you do it often it won't work when you really need it.) Do not take chamomile. That's for gently relaxing, not for knocking out for 12 hours, which is what you need now. Don't bother with valerian either. If you take a big enough dose to make you sleep 12 hours, you'll be fuzzy for the next 24. Valerian is not free from

side-effects.

Now sleep. Have another hot shower and garlic and all the rest of it when you wake up, and try to stay as relaxed as you can through the hassles of the day.

The body is much better able to fight off infection if you are enjoying yourself. If you think this is a good excuse to indulge yourself, you're right, but it's in a good cause, that is, staying upright.

Consider what gives you pleasure: the aforesaid companion in your bed; a box of chocolates; or a combination of both. Hint strongly to your nearest and dearest that a vase of flowers by your bed would be lovely; put on the sort of music you adore; or ask a friend to rent your favourite (light) video or six. Reread your favourite (again, light) book.

This is especially important if you don't have time to be sick. The happier you can make yourself, the faster you'll recover.

A good tea for colds and sniffles

one teaspoon elderflowers (but make this tea even if you don't have the elderflowers)

one teaspoon dried rose hips (you can use rose hip teabag)

half-a-teaspoon chamomile flowers (ditto)

half-a-teaspoon chopped fresh ginger

juice of one lemon

one to three cups of boiling water

one clove of fresh garlic, peeled, and

honey if necessary. However the rosehips should give enough sweetness. (I like to add a few leaves of peppermint and a yarrow flower too.)

Pour the boiling water over everything except the garlic. Steep for three minutes, strain. Cut the garlic in half and pretend it looks like a tablet. Pop half of it in your mouth and swallow it with a good gulp of tea. Do the same with the other half. With a bit of dexterity you won't taste it. (You will however burp.) Sip the rest of the tea, and make more so you can keep sipping throughout the day. A thermos of this besides your bed will stop you getting in and out of the warmth more than you absolutely must.

GORDON WILSON SOLAR

Your Friendly Solar Dealer

SOLAR WATER PUMPING

Remote Area Power Systems
4WD/Caravan/Marine




74 Skene Street, Dunkeld VIC 3294
Phone/Fax: 03-5577 2205
Mobile: 019-937635 Email: ham23@vicnet.net.au

BUSHFIRE PROTECTION AUSTRALIA

ARE YOUR ASSETS SECURE FROM



BUSHFIRE?

PLAN FIRE SAFETY
FOR NEXT SUMMER

NOW

AUSTRALIA WIDE

Principal: Rod Incoll AFSM, Forester and ex-Fire Chief
PHONE: 03 9700 4145 FAX: 03 9706 2575

Log homes come to Oz



Homes built from whole radiata pine logs have many advantages such as insulation, fire safety and style. A new company specialises in this natural building material.

by Michael Uniacke

Castlemaine, Victoria.

WHAT type of natural building material provides excellent insulation and has a high fire-safety rating? If you thought 'mudbrick' or 'strawbale', you're correct. However not only do logs provide both these qualities, but they also have another attractive and unusual feature. If you want to move house, you can do it literally.

The secret lies in the method of log-home construction. Brothers Louis and Cornel van der Heyden, who established Great Bear Log Homes, select whole radiata pine logs and assemble them according to plan in their yard in Mansfield, Victoria. When the shell has been completed, the logs are tagged, disassembled and transported to the client's site. So if you have a log home and you want to move to a new piece of land, it is relatively easy to take it apart again and transport it.

This is only one advantage of a log home. The brothers are custom builders; each log is selected, hand-peeled, pressure-washed and given a preservation treatment before being fashioned to fit the contours of its partners. There is very little waste in this process. The timber is radiata pine grown for their use on their forest sites. Louis says softwoods have a much lower shrinkage factor than hardwoods, and furthermore softwood has more air infiltration through the grain, giving it excellent insulation properties. Log homes have an insulation value

of between R16 and R20, making them warm in Winter and cool in Summer. A conventional weatherboard house has an insulation value of about R4 to R4.5.

Wouldn't they be a fire hazard? Louis gives the example of starting a camp fire. "You use chopped-up kindling," he says. "No-one can start a fire using whole logs. Our log homes have no air gaps where flames take hold. The logs may be scorched, but that's easily repaired."

The van der Heydens build according to a client's design. They have 12 basic designs which the client can use or modify, and they have an architect, trained in the material, who can draw up plans to the client's wishes. While constructing the shell at the Mansfield yard, they encourage clients to visit and view the work in progress.

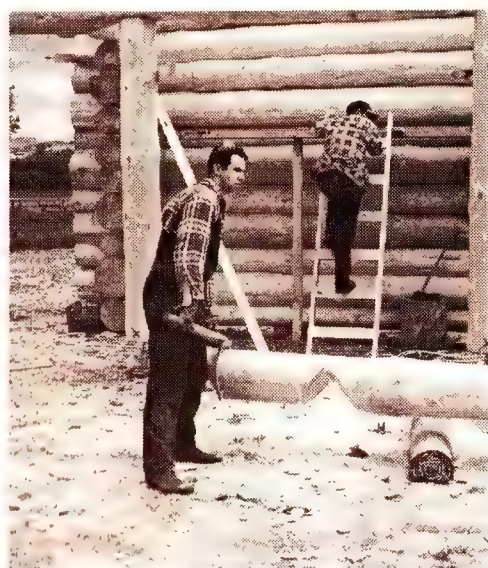
Styles

Clients can choose two styles of log home. The Scandinavian full-scribed method has 'shrink-to-fit' saddle notches. The chinking style uses a coloured chinking compound as a filler for the spaces between the logs. Any type of foundation can be used; the van der Heydens recommend a basement foundation. Because of the insulation qualities, the brothers also suggest double glazing for windows, and that solid timber doors be considered. Whichever plan is chosen, the homes take about eight weeks to build to lock-up stage. The tools the builders use include special log-building tools, a crane, and chainsaws.

The brothers started working life as carpenters. They



A crane helps lift logs into position during building.



Note the special tool for gripping the logs.

went to Canada to pursue an interest in log homes, and spent two-and-a-half years gaining experience building and undertaking a design and construction course. Returning to Australia, they established Great Bear Log Homes, built a display home, and are beginning to attract considerable interest in this new form of building. They are registered builders according to the Housing Industry Association, and are probably the only qualified builders of log homes in the country.

Pride

As custom builders, Louis and Cornel van der Heyden take obvious pride in their log homes. "They are a popular form of building in North America and Canada," says Louis, "and many are still in good condition after more than 150 years. They are durable, timeless, and have a striking presence. Everyone who has seen our log home has the same response — they are awe-struck."



Solid and durable, the logs fit snugly against each other.

• Great Bear Log Homes, 19 Bertrand Avenue, Mulgrave, Vic, 3170; ph: (03) 9547 2424; fax: (03) 9558 5016.



124 one acre freehold sites, set amongst 485 acres of sub-tropical Queensland. Sites selling for \$30,000 ea. You also own the remaining 360 acres in common.



Kookaburra Park *Eco-Village*

Free Permaculture Design

We are offering a Permaculture Design absolutely free for anyone who buys a lot between now and Christmas 1998. Included will be a number of Acacias, Paw Paw, Banana, & assorted fruit trees. So if you have been thinking about coming to have a look, now is the time to do it. Take the advantage of a free start. Our residents are keen to help newcomers feel right at home.

Free Call 1800 061 689, P. O. Box 713, Bundaberg, Qld. 4670.

Email: Kookaburra@sunweb.net Web: <http://www.sunweb.net/kooka/welcome.html>

Cat Awareness Sign For Bush Or City Properties



Whether you love them or hate them, studies show that cats are a major cause of the decline of small native animals and birds. Norman Webb and Lex Metcalf, of St Georges Basin, NSW, have come up with an effective way for property owners (and renters!) to show where they stand.

"We understand that cats are beloved by many people, but responsible cat owners should not let their cats wander onto other people's properties," says Norman. The 'Cat Awareness' sign, which has been professionally produced, and measures 225 mm by 270 mm, has been endorsed by the Native Animal Network Association (NANA). The background is on white waterproof corrugated plastic, the cat is black, the circle and line are red, and the bird is green. At *Earth Garden* we've all bought signs — they're very striking! One sign costs just \$5, for 2-9 signs the cost is \$4.50 each, and for 10 or more signs the cost is \$4 each (all prices include postage). Send cheques or money orders to Norman Webb, 7 Terry St, St Georges Basin, NSW, 2540.

12 VOLT
FLUORO

**FLOURESCENT
LIGHTING**

- TAKES ANY 240V STANDARD TUBE
- Safe and energy efficient
- Draws only 0.6 to 0.8 amps
- Subtle but effective
- Easily installed batten mount

NUMEROUS APPLICATIONS
Emergency lighting
Caravan / camping
Boating
Remote dwellings

ONLY
\$46.
Comes with leads
& battery clamps
(tube not included)

MAIL ORDERS – SEND CHEQUE OR MONEY ORDER ALONG WITH DELIVERY DETAILS, PLUS \$9.75 FOR P & H.

FULL MOON IMPORTS

P.O. BOX 62E, EARLVILLE, CAIRNS, QLD. 4870

PH: 07/4033 0995, FAX: 07/4033 7326

**INTRODUCTORY
OFFER**

3 FOR \$100

GEMBROOK ORGANIC GINSENG PTY LTD

ACN 068-545-068

Fred and Charlene Hosemans

Foundation Members of AGGA Inc

03 5968-1321 phone

03 5968-1322 fax

P.O. Box 44, Gembrook, Vic. 3783

- ☉ American and Korean Seed and Root Stock
- ☉ Books on Cultivation and Research
- ☉ Pure Koala Ginseng™ Product
- ☉ Seminars and Workshops
- ☉ Mail Order Service

**"Setting the Industry Standard for
Top Quality Australian Ginseng"**

WHAT'S YOUR PROBLEM?



BOB RICH ANSWERS QUESTIONS ABOUT OWNER BUILDING

Footings. Putting the roof on. Fitting windows. Which is the best way? Which is the cheapest? What are the dangers? For anything you want to know about owner building, write to Bob Rich, Earth Garden's building guru, c/- What's your problem? Earth Garden, RMB 427 Trentham, Victoria, 3458. Please enclose a stamped, self-addressed envelope.



What's wrong with bricks?

Dear Dr Rich,

I am a fan of yours and enjoy your writing. I have learnt a lot by reading your column in Earth Garden. The only thing that bothers me is, what do you have against the humble brick? To me, a brick is an honest and useful building material. I have been a bricklayer for 35 years, and consider myself to be a useful member of society. Fired bricks have been used for at least 10,000 years, and have been the basis of building all over the globe, in every climate. Yet you 'sling off' at them at every opportunity.

Tom, NSW.

Dear Tom,

If I sling off at fired bricks, I don't for a moment sling off at bricklayers. I don't like bricks because, despite their widespread use, they have several unfortunate qualities.

While we are on ancient history, the culture that used fired bricks 10,000 years ago was the one that built the cities of Harappa and Mohanjo-Daro in the Indus Valley. They had flushing toilets and water on tap, paved streets among multi-storey brick buildings, and an intricate irrigation system. That's pretty admirable for 10,000 years ago; most subsequent societies were far more primitive. Unfortunately, there is evidence that strongly suggests that it was their activities, particularly irrigation, that brought the great desert of the Indus Valley into existence. Technology can be useful, yet self-destructive.

Back to bricks. Here are some of the problems with them. Water will move through bricks by **capillary action**. This is why regulations forbid solid brick walls, and require a 50 mm gap. Even the wire ties within the cavity need to be shaped so that water drips off the middle. Many old houses in Europe are horrible and dank because water works its way through the solid brick walls.

Regulations require a damp course — a layer of waterproof mortar. You're the expert, Tom, but my understanding is that a damp course is actually useless because micro-cracks, formed during drying, leave tiny channels for water to rise through. You also need a solid water barrier.

With regard to water penetration, earth walls are

about the same for rising damp as brick walls, and are much better for keeping out rain falling on the vertical face.

Brick walls are **rigid**. A 100 mm thick leaf of brickwork is more readily damaged by an earth tremor or a runaway car than most other vertical surfaces. In California, old adobe structures regularly survive earthquakes that destroy brick houses. Cyclone Tracey, in Darwin, left a number of earth-walled houses standing, and I have no doubt that the inherent flexibility of earth had something to do with this.

The **energy-content of manufacture** of a brick-walled house is enormous. When making bricks, the manufacturer needs to excavate clay, pulverise it, mechanically mix it with water, shape it, dry it (and air-drying is both too slow and too unreliable), then bake the bricks. It is estimated that the manufacture of one brick generates 1 kg of carbon dioxide. Multiply that by all the bricks in all the buildings around the world, and you can see that bricks significantly contribute to climate change. And this doesn't even take into account the fact that bricks are heavy and need to be transported.

Brick (and concrete and stone) have unfortunate **thermal qualities**. They are good conductors of heat, and at the same time have high thermal mass. A house with uninsulated brick walls will be hotter inside on a hot day, and colder on a cold day. One of the functions of a house is climate control, and an uninsulated brick house makes life less rather than more comfortable.

A layer of double-sided reflective foil helps. It has the same insulating effect as a 25 mm thickness of bulk insulation (R 1.5), as long as it has a minimum 1 cm air-gap on each side. Many builders make the mistake of pulling the foil too tight, so it is hard against a solid surface. This halves its insulating qualities.

Thermal mass is potentially useful, but the brick veneer design converts it into a nuisance. A reverse brick veneer, with bricks inside, then substantial insulation, then anything outside, actually works well.

The typical **red brick colour** is a poor choice for the outside. It is surprisingly dark. This means that it absorbs too much Summer heat, and radiates too much of the house's warmth in the Winter. From the thermal point of

view, a red brick house should be painted blinding white on the outside.

Finally, the same colour considerations apply in a bushfire. In the Ash Wednesday fires in Victoria in 1983, a weatherboard house survived, while a brick veneer two doors down was lost. The reason: the weatherboards had received a coat of white gloss paint a couple of months before, and the high reflection saved the house. The red bricks of the brick veneer were unpainted, and there was no insulation in the cavity. The radiant heat from the firestorm heated the bricks to such an extent that the studs inside caught fire!

Tom, the reason I like earth walls is that the house can be made from materials on site, with minimum energy-content of manufacture, although it is possible to spoil any technique by performing it mechanically. In all but the humid tropics, the house can be made to be more comfortable inside than out, without air-conditioning, and with minimal heating. Earth walls can be made to resist bushfire, strong winds and Earth movements. I have a great respect for your trade, but it is only necessary for owner-builders to hire bricklayers because the small, fussy bricks show up any imprecision. It is easier for amateurs to learn with mudbricks and other earth-wall techniques, and I am all for versatility and self reliance. All the best,

Bob Rich.

Living in a shed

Dear Dr Rich,

Thanks very much for the info in EG 102 on poured versus rammed earth ('Poured earth, rammed earth, and mortar', page 26). It will be very useful.

I am soon to move to some vacant land near Bowraville, New South Wales. The land has an old shed, made from poles stuck into the earth, and an iron roof. My wife and I hope to fix up this shed so we can live there until we build a house. What we need to know is how to build an earth floor. The only information I have seen is about mudbricks on the floor, but we can't wait that long. Can you help us? We are also wondering how to fix or change the support posts to prevent rot and insect attack. We have little money, so we hope to do as much work as we can

ourselves with materials on hand. Any information would be greatly appreciated.

Andrew Hoschke, NSW.

Dear Andrew,

It appears that you and your wife intend to live in your shed more or less permanently. 'Until we build a house' has a rather indefinite ring to it. As far as I am concerned, you should have the right to do so. You'd be doing no-one else any harm! Unfortunately, the law disagrees. There is no place in Australia where you are legally allowed to live in premises that don't meet the building regulations.

If your land is very secluded and the shed well-hidden, you might get away with it. Even then, it only takes one nasty neighbour or a nosey bushwalker. If you are discovered by the authorities, the council has the right to evict you, demolish the shed at your cost, and even heavily fine you. Whether they will in fact do so depends on local circumstances. Find out if there are others in the area who have 'camped' in sheds and similar, and tap into the local gossip.

In some country areas, you are a foreigner if your grandparents weren't born there. In others, new settlers are obviously 'Greenies', must be squashed, and regulations are used to get rid of them.

You are much safer once you actually have a building permit. In some places, and under some conditions, this allows you to live on site in temporary accommodation. Before you move into your shed, it is essential that you check your local council's attitude to this. Some councils let you do what you want, as long as no-one complains. Others will snoop around and fine you heavily if they see you living in a shed, or even in a habitable house, without an occupancy permit. Some will allow you to complete the building in stages, and to include on the plans a permanent structure such as a non-attached bedroom or studio — and to openly and quite legally move into this when it is completed. One shire issues a caravan permit, renewable every six months, as long as your building work shows progress. You are allowed to attach an annex to the caravan, and the annex can be as large as you like.

You can't protect poles from rot or termites once they

FRUIT AND NUTS – GROW YOUR OWN

Huge range of fruit and nut trees, citrus, berries, multi-grafts and exotics.

Also: Ornamental deciduous, Australian natives and weepers and flowering fruit trees.



Plus: Various evergreens to suit windbreaks and hedges.

Australia-wide supply of bare-rooted trees from June to October. Free catalogue on request.

Victorian Treecrop Nursery
810 Brandy Creek Road, Rokeby via Warragul 3820
Ph: (03) 5626 8311

SOUTH COAST FIELD DAY

Sustainable Landuse, Sustainable Living

22nd & 23rd August

Landuse, Forestry, Community,
Building and Technology, Cottage Industry

Candelo, Bega Valley

Speakers: David Holmgren, Pat Coleby and more...

\$6 adult Phone: (02) 6494 2014, (02) 6492 7306

have been buried. This has to be done beforehand. There is no general answer to the question of how long they last in the ground. This depends on the species of timber used, whether sapwood was stripped off the underground parts, whether it was treated with a preservative, and also on the amount of moisture in the soil.

I suggest you design your house, or at least the first stage of it, to be as small and simple as possible. Then, you'll only need temporary accommodation for a short time. So, if the shed's posts in the ground are sound now, they should last as long as you need them.

One of my concerns about your plan is that a tin shed is terribly hot in Summer and freezing in Winter. Put as much bulk material as possible under the roof, and against the walls if they are also metal. I have seen hay, dried bracken, and skirtings from sheep shearing used very successfully. Tacked-on chicken wire can hold this in place, then if you wish you can put on an inside lining of fibro, plaster, second-hand lining boards or recycled plywood.

It is not possible for me to advise you about earth floors without knowing the type of soil you have, and if there are any drainage problems. You should read the sections of pages 91 and 94 of the *Earth Garden Building Book*.

Sandy soil can be stabilised with cement or emulsified bitumen, and rammed hard.

The only way to use clay is to wet it and let it dry,

whether this is as mudbricks or as a poured slab. I have made an extremely hard floor by pouring out some mud to about 150 mm depth, then compacting it when it was 'just plastic', that is, when I could still make a thumb print in it. However, this depends on the nature of your clay. Some clays crack up while drying. Then it is better to pour squares in checkerboard pattern, allow these to dry, then fill in the empty spaces in between the squares. Allow the floor to get bone dry, then fill the cracks with more mud poured in. One young woman did the alternating squares in different colours, then filled the cracks in each square with the other colour. The result looked lovely.

However you do it, an earth floor wears fast unless you seal it. The old builders used blood. (Ox blood for some reason; I don't know how this is different from cow, sheep or giraffe blood!) They also used a 50-50 mix of raw and boiled linseed oil. That was when linseed oil was cheap.

I have not seen any modern sealing agent that works. But if you'll only be in your shed for a short time, maybe a floor covering like 'seagrass' squares, or carpet over lino, might do.

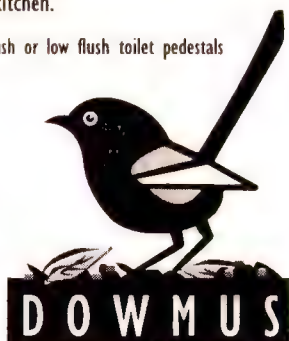
Building your shelter is (or at least used to be) as much a part of the human condition in the way it is natural for birds. You can do it. If I did it, anyone can! All the best,

Bob.

DOWMUS... The Wonder Waste Converter

More versatile than a composting toilet, the no smell DOWMUS is a dynamic waste recycling system for household waste and used water from your bathroom, laundry and kitchen.

- System adaptable to suit either non flush or low flush toilet pedestals
- Recycles all used water for garden re-use and actually reduces overall water consumption
- Converts toilet waste, food scraps, paper and cardboard into compost, rich in worm castings
- No harsh chemicals or heating elements
- Suitable for high and low set installations



RESOURCE
RECOVERY

To obtain your personal introduction package phone

Freecall 1800 814 596

Email - dowmus@ozemail.com.au Web: <http://www.dowmus.com> ACN 075 770 259

IT'S NATURE WORKING FOR YOU

**NEED PROFESSIONAL & PRACTICAL LAND-USE
ADVICE PLUS A RANGE OF PERMACULTURE
SERVICES & PRODUCTS ??**

AUSTRALIA @ FELIX LANDPLANNING CONSULTANTS

**Project Management, Planning & Contracting
Services & Products for Sustainable
& Productive Land-Use since 1993**

Want to Plant Trees in 1998??

**Time's Running Out - Beat the Break with
Australia Felix Contract Planting Services**
All Preparation - Yeomans Keyline Plow Ripping,
Cultivation, Mounding, SWEP Soil Test & Fertiliser
Including Grafted Trees & Provenance Selected Seedlings
Planted, Guarded, Mulched & Watered

**Irrigated Olives around
\$4250/ha or \$17/tree (250 trees/ha)**

**Forest Plantations around
\$1760/ha or \$1.60/tree (1100/ha)**

**Alley Farming around
\$350/ha or \$1.85/tree (200/ha)**

Ph. 0354 418977 Fax. 0354 444483 Mobile. 0417 351 205
E-mail. pcorgbgo@bendigo.net.au

**Professional Designers & Developers
of over 500 properties throughout Australia**

~ Grafting ~

Help your plants get together

Grafting is a valuable skill for gardeners. It can avoid many problems of seedling trees, and can help fruit trees bear earlier. Allen Gilbert reveals several methods.

by Allen Gilbert

Adventure Bay, Tasmania.

WHAT do these words mean: strap, approach, inarching, whip-and-tongue, root graft, cleft, bark graft and condoms? Among gardeners, the topic is most likely to be grafting or grafting methods.

Grafting is used to join two (usually) different plant phenotypes. Phenotype explains variation within plant species, which give rise to varieties (from naturally occurring crosses), and cultivars (plants deliberately bred by experiment or a breeding program). For instance, you may plant a seed of a prize peach, and the seedling tree will grow and bear fruit. The fruit produced by the seedling can look and taste the same as the fruit that the seed was collected from, or it may be an entirely different fruit type, with different flesh colour, different skin colour. It could be fruit with a late or early maturity time. In all cases, the fruits have a similar genetic makeup, but they will, like brothers and sisters, have slightly different arrangements of the genes within the genetic material. The rearranging of the genetic material gives rise to variation within plant species, which most people recognise as varieties or cultivars.

Grafting avoids the problems associated with seedling trees, can be used to make trees fruit earlier, or can be used to propagate a seedling tree with good fruit characteristics. Many people say that budding or grafting is too hard for the average home gardener, and suggest they grow seedling fruit trees instead. However my own experience suggests that seedling-grown trees may take some years to fruit. Apple seedlings, for instance, may produce fruit within five to ten years, usually taking longer than five years; apricots three to five years if left unpruned; peaches and nectarines two to three years; pears seven to 16 years; and plums three to four years if left unpruned. It is interesting that when young seedling trees are pruned, they become extra vigorous, and often shed any developing fruit for a number of years until the tree has reached a mature size.

The seedling-produced fruits of apricots, peaches, nectarines, and plums will usually be of an acceptable type,

and in the case of nectarines, be very true to type (70 per cent chance). But apples take too long and are unreliable (40 per cent chance of a good fruit type), and pears take too long to bear fruit (only 10 to 20 per cent chance of good fruit types). The pear trees more often than not produce fruit that is too small or inedible, and the trees themselves are huge and vigorous. Seedling-grown apple, apricot and pear trees, and some cherry plums, are often very, very vigorous, and their size is hard to control in small orchards or back yards.

If you have a seedling apple tree in your back yard, or have a tree that is unproductive, over-vigorous or bearing very few fruits, then grafting is the way to go! You can graft a few or many varieties onto the one tree to have a sequential supply of fruit varieties. By attending grafting workshops, swapping grafting wood at garden-club meetings, or by collecting wood from old orchards, you can have a supply of heritage apples or any other fruits.

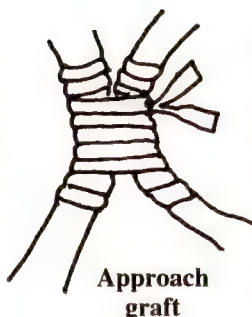
Most fruit varieties and cultivars, including apples, are derived from just a few wild species. The thousands (or maybe millions) of different combinations of various genes has given gardeners around the world the vast collection of heritage apples. Some of the favourite or famous apples include Cox's Orange Pippin, Stewarts Seedling and Maiden's Blush. The modern cultivars available today include Sundowner, Granny Smith and Golden Delicious.

If you collect or swap grafting wood (scions), you should put the pieces in a sealed plastic bag that has been misted inside with water. Put the graft material in an Esky or in a cool place in the refrigerator until it is needed. Dormant graft wood can be stored for a week or two in an Esky, and for several months in a refrigerator.

How to graft

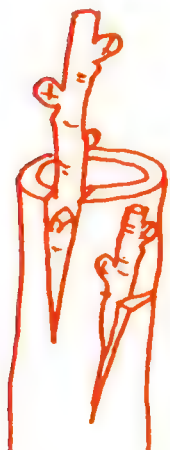
It is best to use a proper grafting knife. This is one that has only one side of the blade sharpened, and the blade must be razor-sharp. Other types of knives can be used, but they will have to be resharpened to have the edge on one side only. A sharp knife ensures a clean cut. Double-side sharpened blades, like a pocket-knife, bulldoze through the tissue and create a ragged edge that you can see under a microscope. This gives less chance of a good graft union.

There are various methods of grafting. **Approach grafting** is often used where a young potted plant is to be grafted onto a larger mature plant. Place the potted plant upon a stand, and lay one of the limbs of the potted plant against a limb of the mature tree. Tie these limbs together. Slice off a small piece of bark just where the two limbs touch, to encourage grafting.



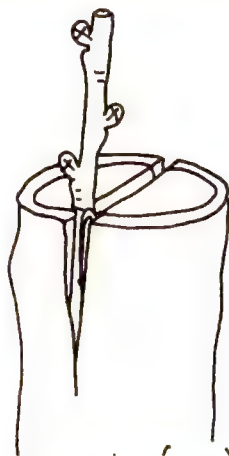
Approach graft

Bark grafts are where a cut limb is sliced vertically down its side for about 3 to 4 cm to bark depth. Use a screwdriver or similar tool to wedge down from the top of the cut to make the bark flaps lift. Cut the base of a scion on a slope on one side, force it under the bark, and then tie or seal. Several bark grafts can be done around the circumference on large cut limbs.



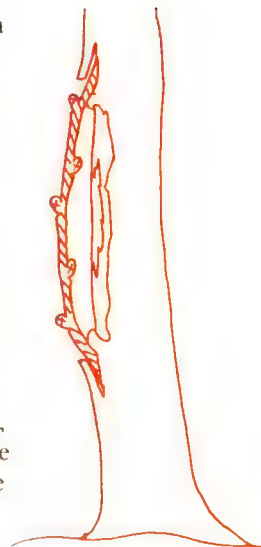
Bark grafts

You can use a knife or chisel (for large limbs) to cut downwards into the limb. Select one or more scions, and cut the base of these on two sides to form a wedge. Place the scions into the cleft area, making sure that the bark of the scion lines up and matches that on the rootstock tree. Tie the graft with budding tape, or seal it with grafting wax.



Cleft (wedge graft)

Inarching is used where a tree trunk has lost a lot of bark because of mower damage, through sunburn, or from disease. Clean the affected area and one or more scions, and bark-graft to each side across the wound area. Effectively the scions form extra bark for the tree, and allow it to survive.



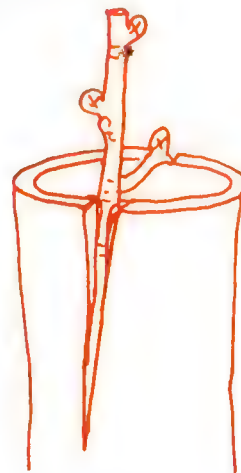
Inarching

Root grafts: If no rootstock is available, a piece of the root of an existing tree can be dug, cut, and a scion grafted to this. The result is a grafted tree in one season.

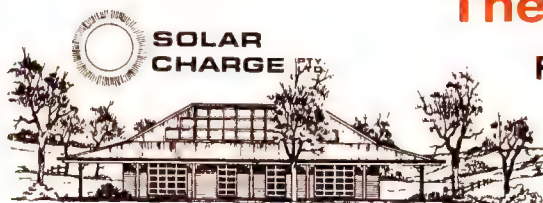


Root graft

Strap grafting is where a scion is placed as a bark graft on one side of a large cut limb, a piece of the scion is strapped over, and its tip is bark grafted to the other side of the limb. This allows a better callous and wound covering to occur over the cut limb.



Strap graft



115 MARTIN ST BRIGHTON VIC 3186
(03) 9596 1974 FAX (03) 9596 1389
PROVEN, RELIABLE and in the business 22 YEARS

The future has arrived early...

Finally, LOW PRICES on Solarex solar panels

 Expect to pay	Our price
80 watt \$800.00	\$599.00
53 watt \$530.00	\$410.00



- ✓ AUSTRALIA-WIDE
- ✓ VALUE LINE PRICES
- ✓ WIND GENERATORS
- ✓ BATTERIES NEW, EX-GOV
- ✓ GAS FRIDGES (DC TOO!)
- ✓ DEALER NETWORK
- ✓ INSTALLATIONS

The **whip-and-tongue graft** is the kindest graft to home gardeners. It is easy, and because there is a lot of cambium contact (the area just under the bark from which callous grows), there are few failures. Cut the rootstock and scion at an angle of about 30°. Use the budding knife to make a 90° cut across the sloped cut, and push the knife down and along to create an almost horizontal cut about 1 cm long. This is the tongue of the whip-and-tongue graft. One cut must be about halfway along the sloping cut of one piece, and the other piece is then cut about two-thirds of the way along its sloping cut. If the two cuts are identical (halfway along), then the union will not meet properly when the rootstock and scion are pushed together. Once the rootstock and scion are prepared, just push the pieces together, and tie and seal at the graft union with budding tape. You can then insert the plastic cap (see below) over the graft area.



Whip and tongue

The secret

The secret to success is not only the graft itself but also a system I have adapted for the home-garden that uses what I call plant condoms.

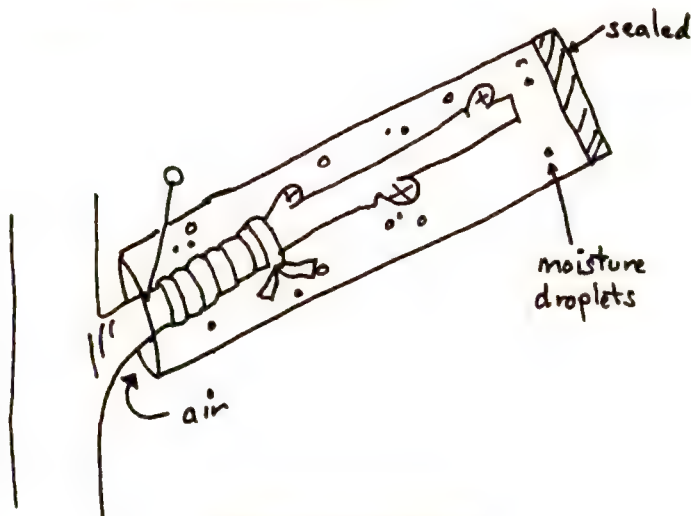
These are plastic sleeves (clear plastic or white), sealed at the top end, open at the base (to allow air circulation), and containing misted water inside. They can be used to cover most grafts. You can make the cover from recycled plastic bags or cut packaging tube plastic. Place these plastic caps over the graft and hold them in place with a pin.

The cover prevents the scion drying out, and can raise the success rate of home grafting to 100 per cent. You can leave the plastic sleeve or condom over the graft to provide high humidity and warmth until the graft has taken. The humidity prevents the scion drying out, and the warmth helps callous formation.

You can tell when the graft has taken when new shoots start to grow from the scion.



V graft



Plastic cap (condom)

The **V (or wedge) graft** is a simple graft used on tiny new shoots, dormant hardwood or large limbs. Cut off the lateral or limb, and place a cut vertically downwards into the limb. Prepare one or two scions by sharpening them into a V-shape, and push them into the open cut (wedge), aligning the bark edges of the scion and rootstock. Then seal or tie the graft area.



WINTER ON AUSTRALIA'S HOLIDAY COAST *Inspiration*

VISIT TAREE FOR A BIG 3 DAYS OF FAMILY FUN THIS JUNE LONG WEEKEND.

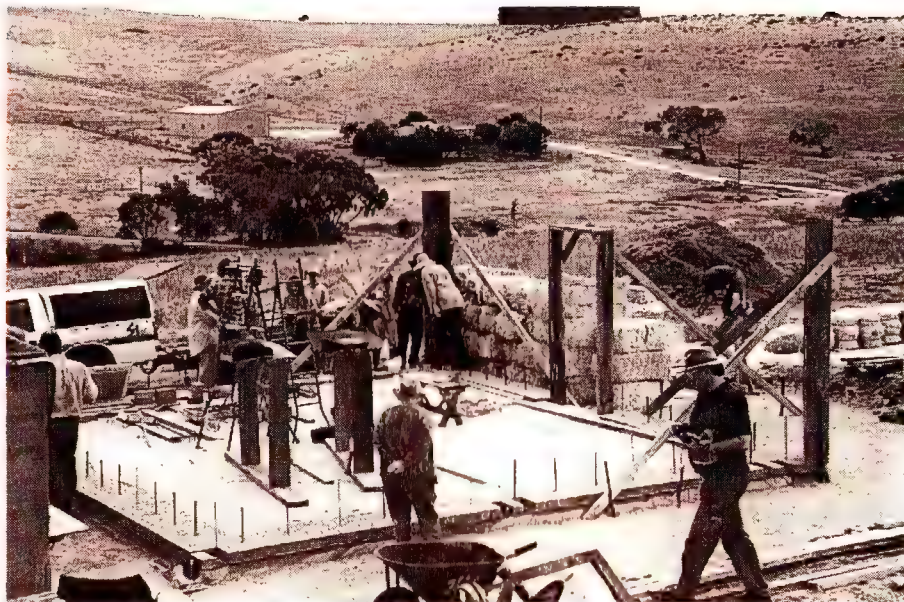
Take a FREE look at the latest products/services for a cleaner, greener environment at the celebrated Taree ENVIROFAIR. Then embark on your 2 day self drive sticky beak tour of the area's most inspirational NON-CONVENTIONAL HOMES - poured & rammed earth, mudbrick, wattle & daub, stone and timber.

ENVIROFAIR 10-4PM SATURDAY, 6TH JUNE. Free entry, food available. For more info contact JoAnn Wallace (02) 6553 7272 (ah)
NON-CONVENTIONAL HOMES TOUR 9AM - 4PM SUNDAY 7TH & MONDAY 8TH JUNE. Guide/Maps just \$20 for each family.
Reserve your copy by Friday 22nd May from the Manning River Steiner School. Phone: (02) 6551 3403 or Fax: (02) 6551 3422.

South Australia Strawbale Building Boom Is Launched

STRAWBALE building is taking off in South Australia, with 20 people attending a workshop at Port Elliot in January. Lance Kairl, of *House of Bales!* invited the presenters, Gary Dorn and Lance Brandes (from *Build It With Bales*, in Western Australia), to Port Elliot because of their earth friendly methods (that is, minimal use of timber, no wire and lime-based renders). The workshop group erected and rendered the front wall of a 7.5 m x 16 m council-approved building. This included the installation of door and window frames, with the wall seven bales high.

"1998 looks like being a great year for strawbale building in South Australia with a dwelling erected in



Workshop participants get ready to start work on a SA strawbale building.

Whyalla in February, and at least two other owner builders hoping to have their dwellings substantially completed by the end of the year. I will also be running more workshops in the Port Elliot area," said Lance. You can contact Lance on (08) 8554 3587 (AH) for details of his forthcoming workshops.

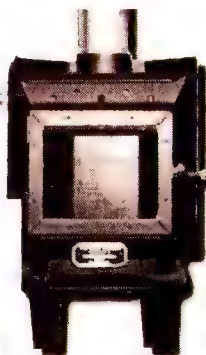
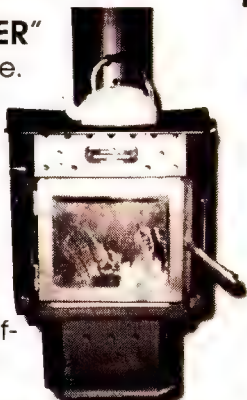
WOOD HEATING WITH RUSTIC CHARM AT AN AFFORDABLE PRICE



**NED KELLY
WOOD HEATERS**

"BUSHRANGER"

2 sizes available.
Heating 20-30
and 10-15 sq.
Rear shield
enables close
installation to
heat-sensitive
walls. Cooktop
and large,
panoramic, self-
cleaning glass
door.



"RADIANT"

Budget priced
heater with
cooktop and
triple burn
firebox. Heats
10-12 squares.

"POT BELLY"

Budget priced, with
cooktop. Will
heat 10-15
squares. This
uniquely
designed,
rustic
radiant
heater
complies with
AS2918.1900



ALL MODELS:

- 5 year guarantee • All Australian product
- Overnight burning • Radiant and convected heat
- Cooktop • Environmentally efficient
- Conform to AS 2918:1900 • Delivery Australia wide
- Options: 3-speed fan, rear flue and water jacket
- Inbuilt model available

FOR MORE INFORMATION:

Colin Richardson,
Railway Cres., Daylesford, Vic. 3460

PH: 03 5348 2586

A career that wriggles

After raising a family, Carole and Lloyd Pickering opened a bed & breakfast venture. Their guests, however, are long and tubular, and quite happy.

by Carole Pickering

Waterford, Queensland.

THE collapse of the house market thwarted our resolve to buy a bed & breakfast establishment in Tasmania, so Lloyd and I decided to look for a business a bit closer to home to get us out of the rat race. We had a couple of acres of land which up until now was not being used to its full potential. Lloyd at 52 was getting on, and wanted something a bit slower that did not require fighting the city traffic as he had been doing for most of his life. As for myself, I had stayed home to raise three children until recently. At 50 I found I preferred the home life to going out to work, so Lloyd and I both needed to make major changes.

An ad for 'worms' in the paper drew our attention. The ad said a company was expanding its composting business into Queensland, and needed people to contract to grow and sell their worms at \$30 per kilogram. All that was needed was an initial contract fee of \$3,000 which guaranteed their purchase from the grower of ten kg of worms per week. As we didn't have a lot of ready cash, this looked like it might be worth considering.



(above) Lloyd levels the ground and lays a road base for the floor of the worm beds.

(right) The worm beds, ready for manure and worms.



Simple

Growing worms seemed a pretty simple sort of set up. After some deliberation and research, we decided to abandon temporarily the B & B idea, and have now embarked on a new career, one we hope will wriggle along quite nicely. Lloyd bought some treated pine board, and made beds 2 m by 3 m by 500 mm high. Because our particular area has quite heavy clay underfoot, we felt that extra drainage would not go astray. So after levelling a little, we laid a base of road basing and gravel, with weedmat on top of that. Not only was this to deter any would-be invaders and prevent weeds from getting into the beds, but it also made us feel better. The whole look of the place was upgraded and made easier to keep tidy. Over the top we erected a shade cloth awning to cushion the sun's rays.

Inside the boxes we placed a layer of cardboard or newspaper, then a covering of lucerne hay. We watered this down for a couple of days, and then placed a barrow load of cow manure in the centre. Into this manure we placed the nucleus of our worm farm. When subjected to the light, the healthy worms immediately dug deep into the new feed bed. From then on it was simple to water occasionally to keep the bed cool and moist, but not wet.

Other growers lay their beds a slightly different way, with perhaps a layer of dry sand and other mulch, such as cane mulch. These are all good ideas, and we will try them out in the future. Any grass clippings or food scraps, shredded paper, and almost anything that was once living

can be added to the feed. The only exceptions appear to be onions and citrus. It is not that the worms will not eat them, but rather they're just at the end of the preference stakes, and will sit in the box a whole lot longer.

Doonas

As our particular farm is in an area with quite a few heavy frosts, and worms are not particularly keen on extreme cold, I made doonas for all the beds. I took hessian potato sacks and lightly filled them with straw. The worms just loved them. As the bags gradually rotted and were eaten away, the sacks became a favoured breeding ground, with healthy capsules everywhere.

Lloyd is still driving his truck during the week, so we head off about every second Saturday and get a couple of trailer loads of cow manure from a local farm. We also have a couple of local horse stables whose owners put aside the horse dung, and we gratefully accepted donations of discarded produce from the local fruiterer. In the coming months we hope to erect more beds so we can try the different methods used by various growers. As Summer arrives with its rains, we will have to take care to prevent overwatering of the beds, while at the same time keeping them relatively cool.

At first, when people asked me what we were doing, it was a bit hard to come outright and tell them 'growing worms'. It seemed like such a lowly career move, especially after our B & B aspirations. Since then we have come to appreciate the very definite benefits of being growers of underground livestock. For example, the little critters make no noise (a real boon in a built-up area), and they don't smell. If they do, something is wrong with the beds. The natural smell is of an earthy forest floor.

The worms can reproduce at an excellent rate that varies according to feed with from 12 to 20 young per capsule (egg). The particular make-up of the compost



The worm harvester sped up the harvesting.

produced by the worms ensures its bacteria is benevolent, and is so prolific that disease-producing bacteria are insignificant. We don't have to leave home to run this business, and we don't have any complaints from our wriggly guests about the quality of our beds or the breakfast we have given them.

In memory of the demise of our first idea, we have erected a sign on our new shadehouse over the worms reading, 'Ye Olde B & B, Worm Beds, Country Breakfast'. We are still considering whether the B & B stands for bed and breakfast or something more sinister.

Harvest day

It soon came time to harvest 20 kg of our worms. Having cared for our worms for the past five months, we were keen to get going and actually make some money.

Being smack dab in the middle of Summer was not good. Lloyd and I had already decided that we would start early in the day and try to get our worms out before he had to go off to work at about 11 am. Well, we set ourselves up with an old table covered with black plastic, and sat it on top of a couple of 40-gallon drums under a large gum tree

SOLAR FOOD DEHYDRATOR

Using the Solar Safe you can harness free energy from the sun to preserve food naturally without using chemicals, sugar or salt. Enjoy a supply of homemade, natural, healthy food all year round. The Solar Safe is rain and insect proof, simple to use and has no running costs.

Write for our free brochure to
John or Sharron at:

SOLAR SAFE
R.M.B. 2317 EUROA VIC. 3666
(03) 5790 4329

Patent pending No.: PN0137



When you buy from us you buy the experience
of 21 years full-time in earth-building



● natural and semi-stabilised puddled bricks

● large variety of brick sizes

LET THE CIRCUS PERFORM FOR YOU!

PHONE: (03) 5422 1808

Making Money

\$\$ From Home \$\$

It's easy when you know how! And the best way to find out how is by getting a copy of **Australian Business & Money Making Opportunities** magazine. Every issue is packed with information on affordable and exciting money making opportunities (full or part time). It's sold from Newsagents across Australia & N.Z. and is found in the business section. EG readers can get a recent issue by sending 4 x 45¢ stamps with your name and address to the address below. We also produce the following publications.



AUSTRALIAN BUSINESS GUIDES

Each of the following titles will introduce you to the procedures for making money from a wide range of ventures. Each is designed with a "shoestring" budget in mind

101 MONEY MAKING OPPORTUNITIES:

This guide contains details on more than one hundred business opportunities which require minimal investment to start. Sources of further information are also listed #21.....\$8.00

HOW TO PROFIT FROM YOUR HANDCRAFTS & HOBBIES:

Here's the information you need to make money from your handicrafts/hobbies. If you're looking for valuable advice and suggestions on how to profit from your handmade products then this title is for you! #22.....\$8.00

HOW TO START A MAIL ORDER BUSINESS.

This title consists of our most popular guides covering the area of starting and operating a Mail Order Business. If you are looking at alternative ways of doing business, then Mail Order could be what you've been looking for! #23.....\$12.00

MAKING MONEY FROM FLEA MARKETS.

Making money from a stall at a flea market or swap meet is easy if you know how. This guide takes you through the process and outlines what you should and shouldn't do to make your business profitable #24.....\$8.00

MAKING MONEY WITH YOUR HOME COMPUTER

Turn your home computer into a money making machine. This guide takes you through money making opportunities which include: Desktop Publishing, Newsletter Publishing, and concludes with more than 100 ideas which have potential depending on your area of interest #25.....\$12.00

MAKING MONEY WITH YOUR CAMERA

With this guide, you can turn your camera and talents into a profitable full or part-time money making business #26.....\$8.00

START YOUR OWN IMPORT/EXPORT BUSINESS

Find out just how easy it is to start your own Imp/Exp business. Very little money is required to start, but the profits can be enormous once established. An exciting business with a big future #27.....\$10.00

HOW TO ORGANISE A SUCCESSFUL HOME-BASED BUSINESS

A Home-Based business is an ideal business to start. Find out how to make sure your business is a success right from the start. This guide covers all the issues you need to consider as well as the traps to avoid. #28.....\$8.00

P&H for single/multiple guides is \$3 per order.
All orders come with a 7 day Money Back Guarantee.

Send to: Achievers Information,
PO Box 518, Dept EG1, South Windsor,
NSW 2756. Fax (045) 77 6942

Established
1989

ORDER & INFO COUPON

Mr/Ms/Mrs

Address

..... P/code:

SAVE\$\$ - Buy any 3 and choose a 4th guide for free

Buy any 6 guides and receive ALL 8 for the same price

Enclosed is Chq/MO for \$3 p/h + \$..... for Guide/s No. □21 □22 □23 □24

BONUS Current issue of AB&MMO magazine □25 □26 □27 □28

sent with every order (valued at \$4.50).

☐ Yes, send me a recent issue of AB&MMO magazine.

Enclosed are 4 x 45¢ stamps to help offset postage.

☐ Please send me your FREE catalogue of books & guides.

☐ I'd prefer the current issue of AB&MMO magazine.

Enclosed are 10 x 45¢ stamps for magazine and to offset postage.

**Look for AB&MMO
at your Newsagent**

193

close to the worm beds. Not having done this before, it took us some time to get into a good routine. Unfortunately, the worms were not cooperating. The hot weather was playing up with all of us. The temperature was rising by the minute. If the worms are left in the heat too long they start to stress out, froth and eventually die, so we had to be swift.

The idea is to place a pile of worms and castings on the table top. The worms will then head away from the light towards the bottom of the pile. We removed the castings until eventually there were a mass of worms left on the table. We weighed and packaged this with dry castings in 2.5 kg lots. Two-and-a-half kilograms of worm is a lot of spaghetti.

By 11 o'clock we had managed to extract about 12 kg. Lloyd had to go off to his job, but fortunately our daughter Karen and granddaughter Jasmin arrived, and willingly took on his job. By this time the sun was moving across the sky at such a pace that we moved our table about three times following the shade of the tree. By 2.30 pm we finally had our 20 kg harvested. With the temperature in the high 30s both Karen and I were pooped. Jasmin (3) stated "This is disgusting", and adjourned to the house to watch the Wiggles. When we finally finished and prepared the packaging, we retired to the house, and bedlam. Jasmin had left the plug in the bathroom sink and the tap running.

That was our very first harvest. The following week we decided to do it the easy way. We hired a worm harvester at \$65 for four hours. We did the harvesting in less than two hours and couldn't believe the difference. Since then we have been hiring the harvester often.

Our hand-harvesting has also improved to the extent our last harvest of 20 kg was accomplished in three hours. I think our approach may have been the key. Instead of rushing into it, we took our time, laid out more table space, and let the worms do most of the work. We erected a shade cover next to the beds, and enjoyed a few beers before starting. This helped fortify us and cheer us up.

Our money has started coming in now; it feels good finally to receive something back for the five months of initial work. All going well, we'll continue, and maybe expand into other areas of the worm industry.

Solar • Wind • Hydro

RENEWABLE POWER SYSTEMS

- Solar Panels • Deep Cycle Batteries
- Inverters • Control Equipment
- Wind Generators • Composting Toilets
- Bio Paints and Varnishes • Gas Refrigeration

RENEWABLE RESOURCES WORKSHOP



Rod, Ros & Andrew Menzies

1 Railway Street, Colac

Phone: (03) 5231 3593 Fax: (03) 5231 1844

Full SEIAA Accreditation No. F537 F538

Is this a roof I see before me?

What is really involved in building a mudbrick house? For Dave and Lesley, it was far longer and much harder than they realised. But for Dave especially, there were immense rewards from staying home with the children as the family's house slowly came together.

by Dave Brown

Wollombi, New South Wales.

"LET'S see. Five hundred bricks a week. Easy peasy. And 500 the next week and another 500 the week after that. So, if we need 16,000 all up, it'll take us . . . calculator, please . . . um, yes, 32 weeks. Allow a fudge factor or two — rain, too hot, visitors, days off — say, ten per cent, another three weeks. Laying? Mmmm, 500 a week . . . another 35 weeks. Roof, fitting out — what, six months? Hey, Lesley, we'll have a house in a couple of years."

No-one could really be that naive, could they? I mean, no would-be-owner-builders would miscalculate so optimistically, surely? Yeah, and pigs'll fly too.

I know two lapsed urban professionals (I've called them Dave and Lesley to protect the innocent), who before they became mudbrick owner-builders, believed they'd make their 500 bricks a week. A lot wiser now, six years and nearly 9,000 mudbricks later, they understand why their architect cum mudbrick guru advised them to "think of a number, double it, and double it again" if they wanted to know how long it would take to build their house.

Speak to Dave and Lesley these days and they'll tell you they were lucky to make or lay 100 a week.

"We managed 500 bricks in a week, once," Lesley told me, "but we were so tired we had to have the next week off. And that was with Dad helping in the making and Mum providing a full support service of childcare, meals, washing and so on. After ten hours of mudbricking, all we wanted to do was clean ourselves up, shovel down some food and collapse into bed."

Not really trying?

One hundred bricks a week, made or laid. Sounds like they're not really trying. Not true, according to Dave.

"Lesley's in full-time paid work, so we're lucky if we

get two days a week to work on the house together. I'm at home full-time, tree-farming, mudbricking and keeping the household running. I mix mud one day, make maybe 40 bricks the next, turn and stack them when they're dry, and sift some more dirt for the next lot of bricks, but that's about it during the week. When Lesley's home, we lay bricks so long as school activities, sports, weather, trees, solar panels or whatever don't get in our way."

For a while, Dave kept a record of how many hours he worked on the house and how many on other things. The results, he says, were "pretty scary".

"Over 18 months, I managed to work on our house on only 272 days. I worked more than 4,000 hours in the 18 months, at almost 60 hours a week, but only 913 of those hours, less than 25 per cent, were spent on the house.

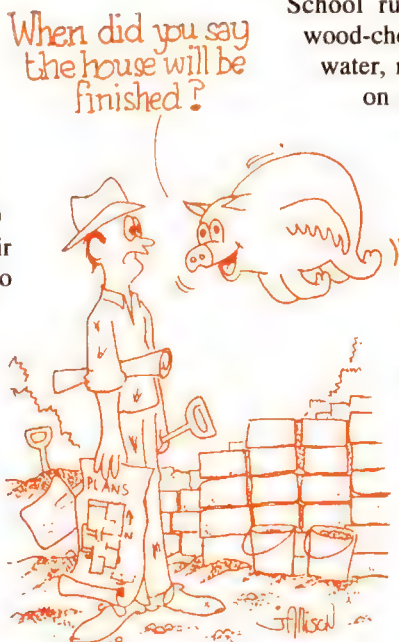
School runs, shopping, washing, washing up, wood-chopping, tree planting, cooking, pumping water, mowing, slashing, pool cleaning and so on gobbled up the rest. And I didn't even count the hours I spent on things like P and C meetings and kids' sport."

Of course, Dave wasn't the only worker on site. "Lesley, her parents and a few friends worked on our house in that 18 months. When you add their hours, we totalled just over 1,500 hours on the house. We made and laid almost 3,000 bricks in that time. We thought the sprouting walls looked pretty good, and we ignored the comments about Mudhenge and Roman ruins."

Lesley's convinced they're getting better at estimating the time it'll take to do any particular job. "We worked out that, allowing for sifting, mixing, making, turning, stacking and laying, it takes us about 25 minutes to get each brick into our wall. In 1994 we estimated that we had about 130 days of mudbricking to go on the first stage of our house. We were only out by 20 days, but it took us almost two years to put in those 150 days."

So what advice do Lesley and Dave have for would-be muddies?

"Give it a go. Don't look at the 15,000 bricks you



need, look at the wall you're building today, or the bricks you're going to make tomorrow. Get out on someone else's site and try it for a couple of weeks. Then you'll have some idea of how long the days can be, how dirty and uncomfortable you'll get, how slow your progress will be if you continue paid work, and how hard it is if you have kids who are trying to grow up around your housebuilding.

"And never forget the 'Double It' rule. Our kids were nine and six when we started. They may well have grown up and moved away before we finish their rooms."

Reassurance

If you're worried that mud-bricking is just about hard work and hard times, Lesley and Dave are quick to offer reassurance. "Sure," says Dave, "We've worked bloody hard, but it's about lifestyle, too. Late in 1991, I resigned from my paid job and became a full-time dad. I could've done without the domestic duties, but being with our kids has been great.

"For six years I've been there to drop the kids off at school, kissing them goodbye at the gate and picking them up again at the end of the day. I've seen their fun with their mates, shared

their trouble and their great times, been with them on their excursions, and talked with them about their teachers and their friends. And when they've

come home, I've shared their afternoon, kicking the footy or helping with homework. In the quiet times at the end of the day I've read the goodnight books, chatted with them about their day, and as they've drifted off to sleep, I've treasured their kisses and cuddles.

"I've shared their innocence and their wonder, felt their anger and their sadness. I've helped make them what they are, and what they're going to be. I've loved and been loved. Few dads can have been so lucky."

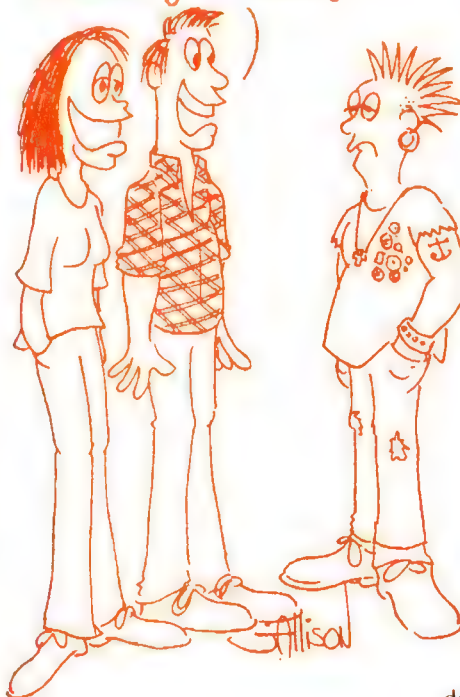
The last time I heard from Dave and Lesley, their roof was on and they only had to rub

down the walls, do a bit of

painting, lay mudbrick floors, fit out their kitchen, bathroom and laundry, finish the electrical and plumbing works, fit windows and doors, put in a staircase and do some cladding.

It'll probably only be another four years before they're living in stage one of their house, unless roadworks, erection of a wind generator or Dave's imminent return to full-time paid work slow them down.

We've finished the house son...your nursery is ready!!



The Secret Power of Feng Shui

beyond what's in the books

Discover how to:

- * release imprisoned wealth
- * feel more at home - at home
- * make work more harmonious

In February this year Master Joseph Yu impressed Australia's most accomplished Feng Shui practitioners by revealing secret formulae that can enhance your wealth and health.

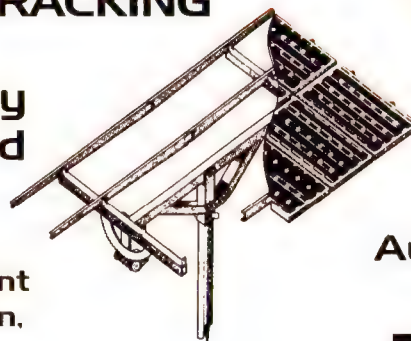
Learn authentic Classical Chinese Feng Shui from a Master

The seminar program covers:
The "Flying Star" School of Feng Shui
4 Pillars of Destiny Astrology
Zi Wei Astrology

FREE Talks	Courses
Brisbane 25 June Sydney 1 July	25-30 June Brisbane 1-13 July Sydney

CALL 1800 898 878

At last.....a
SOLAR TRACKING
system
everybody
can afford



for an efficient
solar solution,
contact:

Davy Industries
RMB 1036, Barnawartha Nth., 3688
Phone/Fax: (02) 6026 7711

Make your
solar array
30% more
efficient!
(averaged
over 12
months)

and it's
Australian
made!



We won't let the sun go down on you

Still Going Solar After 20 Years

ON 4 APRIL hundreds of people dropped into the Melbourne shop, *Going Solar*, to celebrate 20 years of the supply of self-sufficiency products and devices by the North Melbourne landmark. Throughout the day there was a party atmosphere as people dropped by to remember staff, suppliers, customers, and especially the

founder of *Going Solar* — Stephen Ingrouille. The grandfather of self-sufficiency suppliers (who's really only in his mid-30s), Stephen was the focus for much of the celebration because of his drive and initiative in establishing and maintaining a new form of 'Green' trade — supplying genuine sustainable living products, rather than many of the

pseudo consumer items which have sprung up in the 90s by marketers who put a dolphin on their label and brand their product 'recyclable'. Everything from solar ovens, worm farms, ultra-efficient wood heaters, solar hot water units, apiary

At left: people celebrate at *Going Solar*'s birthday.

Below: Reverend Tim Costello spoke movingly.

supplies, to an extensive range of books and magazines is on sale at *Going Solar*.

Reverend Tim Costello from the Collins Street Baptist Church, one of Victoria's most active and outspoken social reformers, spoke of how businesses like *Going Solar* play a vital role in Australian society. *Earth Garden* editor, Alan T Gray also spoke, and the throng of over 100 people poured onto the footpath for a group photo. It was a delightful day and *Earth Garden* wishes Stephen and his staff and partners and suppliers another prosperous 20 years of going solar.



FARMING THE FUTURE EXPO

"Australia's Original Showcase of Farming Alternatives"



31st July to 2nd August, 1998

at the

SPORTS COMPLEX, COOROY, QLD.

Have you something new, different, unique and interesting? You can't afford to miss the opportunity to reach 30,000 of your target market.

This UNIQUE Expo features: Alpacas, Ostriches, Emu, Deer, Hydroponics, Herbs, Craft, Organics, Solar Energy, Exotic Foods, Fashions and more....

**400 EXHIBITION SITES
Selling NOW**

Book now to avoid disappointment

Enquiries: Phone Marshall (07) 5474 8230



AUSAXE

Quality axes made in Queensland, COD to any P.O. in Australia. For brochure & colour photo, write to D. & M. Shaw, 18 The Locale, Nerang, Qld. 4211 or Ph: 07 5578 2920 or 015 594 207

AUSAXE

Queenslander 3.6 kg
Broade Axe \$250.00 ea
plus postage



WHIPS



AUSAXE Canadian
Double Bitted Axe
polished 1750 gram
head, 900mm handle
\$160.00 ea plus postage

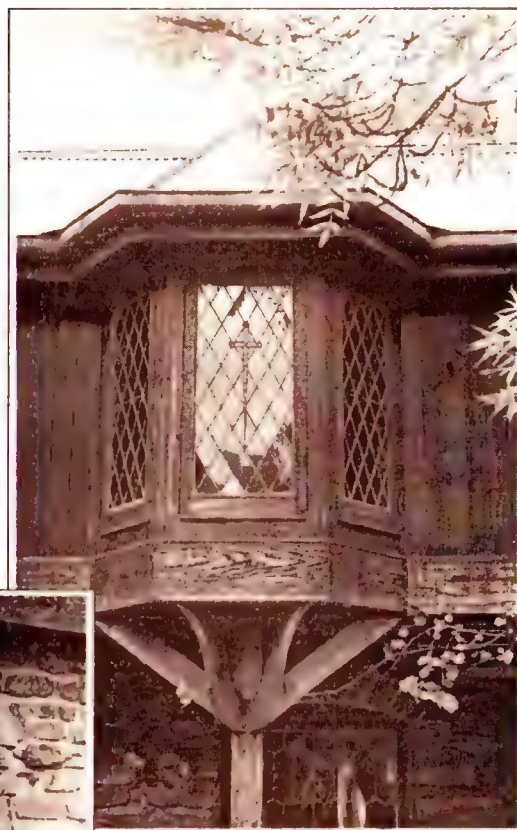
With Your Own Hands

Many of our readers have built, are building or are dreaming of building their own homes.

These pages contain some images of hand-built houses, or details from them, that we find inspiring. We'd like to hear from EG readers with something special to share with us all. Each issue, we'll publish the most interesting photos, with a one year subscription going to the most original and inspiring offering.

Send your photos and a brief description to "With Your Own Hands", c/o Earth Garden, RMB 427, Trentham, Vic, 3458, enclosing a stamped, self-addressed envelope if you wish your photos returned.





Photography by Narelle Chellew and Doug Falconer.
Many thanks to Martin Humphries, Bruce Davidson, Ben Laycock and Jacinta Walsh.

Questions & Answers

... with Jackie French



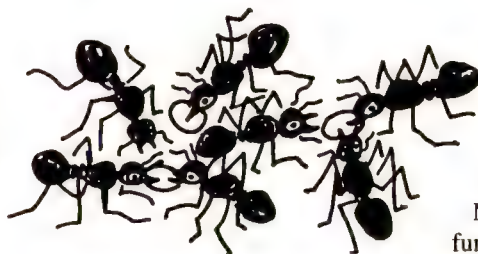
If you want to grow your own tea, cope with termites, grow chillies or cherries, make cheese or convince a broody chook to lay again, write to Jackie at PO Box 113, Braidwood, NSW, 2622. All letters will be answered in this column.

Ant thieves

Dear Jackie,

How can I stop the ants marching off with my seeds when I sow them? I can even see them carting off the ones that have just germinated.

Chris, Summerland Point, NSW.



Ants often steal seeds.

Dear Chris,

Keep all stale oil when you fry your zucchini pakoras and banana fritters, or even use fresh stuff if you're feeling extravagant. Mix with one part ground white pepper or ground chilli, one part old dried tea leaves, and one part dried milk. The tea leaves and hot stuff repel; the milk helps stop seeds rotting, and the oil makes it all stick to the seeds. Add seeds and mix well.

You can just try a dust of oil and pepper. An old hint for sowing carrot seeds was to sprinkle old tea leaves along the furrow before you plant. But a word of warning. Too many tea leaves mean too much tannin, so the seeds may shrivel after they germinate. Unless you've got lots of spare tea leaves, don't bother with them, and even then, make sure they are well used.

For large amounts, say if you're sowing a pasture or a paddock of corn, try binging the whole lot in a cement mixer. In this case you might also add some sieved dirt. It'll bind into the mixture. Then spread the seeds out and dry them before sowing. This was the only way I could get clover seeds to germinate on unploughed ground. If I just scattered it, the ants, birds, rodents ate it, or it shrivelled as soon as it germinated. But coating the whole lot with dirt worked wonderfully as a form of bulk pelleting.

Coating seeds with oil and dried milk also helps stop seed rotting. I always coat pea and broadbean seed if I'm

putting them in when we might have a long cold snap, during which the seed might rot before it germinates. (I find our own pea and bean seed doesn't rot, whereas commercial ones do. Not sure why.

Maybe our seed is more tolerant of soil fungi here, or tougher because it's left to mature longer, or it's the nice organic growing methods. Dunno.)

If ants are a major problem (and it sounds like they are), your soil needs more organic matter. Ants like structurally sound that is, dry soil.



Repel ants by coating seeds with oil and pepper.

Jams sans sugars

Howdy Jackie,

My query is a quick one. You once mentioned a recipe for sugarless marmalade. Would this recipe work using guava? If so, could I have a copy? And are there any other sugar-free jams and chutneys for my diabetic husband? Thanking you for your fun and informative writings,

Ruth, Miriwinni, Qld.

Dear Ruth,

Yes, you can make it with guava. Though 'jam' isn't really the best word. It probably should be called 'jelly', which it is — except you can use it as jam. To make sugarless jellied anything (in the fruit line I mean — not jellied eels, jellied calf's head and so on), stew fruit until cooked, but not squishy. Mash it with a potato masher. Don't use the blender; that will turn it into baby food. The potato masher effect is exactly right — puréed but still with some texture.

Sweeten to taste (if you want to sweeten it) with any of the artificial sugars. Now make up jelly according to the manufacturer's directions on the back of the packet. This

varies according to brand. I find I need about one part jelly (made with gelatine and hot water) to one part thick fruit purée, but I do tend to make my jams and jellies too jelly-like anyway, and one part jelly to two or even three parts purée may be best. Mix well. Leave to set. Keep in the fridge and eat within a week or so.

If you've got larger quantities of fruit, keep the purée in the freezer until you want to 'jelly' it. You can of course simmer fruit with pear or apple juice for a natural sweetener, but this is still too sugary for diabetics, natural sugars or not.

I also find a good squeeze of lemon juice and a dash of tabasco makes the whole thing much more piquant and sweet-seeming. Don't worry. A drop or two of tabasco doesn't make it hot. It just accentuates the flavour. But don't overdo it.

With chutneys, use any recipe you have on hand, substituting sugar substitute at the end of cooking, not while you're cooking it. Unlike jam, where you need sugar for the process to work, the sugar in chutney is just for flavour, although it can help preserve it. So perhaps keep these chutneys in the fridge and don't make large amounts.

The nicest sugar-free 'jellies' I've made have been with raspberries and apricots, without any added sweetening, natural or not. They're both very full-flavoured fruits. Subtle flavours will probably be drowned out by the favour of gelatine.

Note 1: I have seen a recipe for 'sugar-free' jam using commercial pectin, but this is usually mixed with sugar, so it isn't suitable for diabetics. Note 2: You can make your own jelly by boiling bean seeds. The proportions of beans and water seems to vary. (Tofu is really just a bean jelly.) There are seaweed-based ones (agar agar) if you don't want commercial animal-based ones. Note 3: Most 'jam' fruit is very sweet, even without sugar. All jam must be included when you're calculating how much sugar you've eaten, even if it is mostly natural fruit. 'No added sugar' doesn't mean it's safe.

Pumpkins and lawns

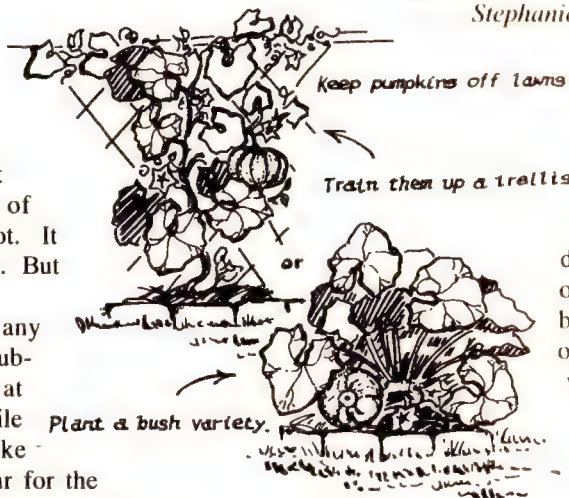
Dear Jackie,

I wish to grow pumpkins in a pile of tyres, but I can imagine them growing and sprawling all over the back lawn. I like using the lawn clippings to add to my compost bin and to mulch the various gardens, trees and shrubs. I live with my mother and she, unlike me, likes her expanse of lawn. I intend to move eventually so I wouldn't like to make

any drastic changes to her property.

So, when growing a pumpkin (or any cucurbit for that matter), wouldn't it root itself down in various places in the lawn so moving it temporarily to mow would be out of the question? And I've read in your books also that you can train them up on a trellis. Therefore the vine would not be rooting itself down anywhere, if it's being trained skywards. Can you give me a suggestion for growing pumpkins without holding up a lawn? And can you tell me if pumpkins send down roots to ground themselves every so often?

Stephanie, Ipswich, Qld.



Dear Stephanie,

No, pumpkin vines don't root themselves along their trailing stems. They draw all their nourishment from one main stem and root system. A sprawling vine will knock the grass underneath it back a bit though. Try training one up a pergola, or just grow one of the bush varieties that don't sprawl. (These often produce mature fruit a bit faster any way.)

Citrus in compost

Dear Jackie,

I have heard that there is a problem with too much citrus in compost. On average, the waste from three pieces of citrus a day go from two people into our compost. Will this deter our worms or affect our garden in any other way?

Rebecca, Brisbane, Qld.

Dear Rebecca,

You're right. Too much citrus can turn compost into gunk, unless it's well-managed. I know of one compost system that is almost pure citrus, but it's rotated and tended by an expert. Basically citrus is high in sugar (which attracts fruit fly and various fungi), oil (which impedes its breakdown), and water (which turns it into gunk). But three pieces a day should be fine as long as there's plenty of other good stuff. By good I don't mean last night's leftover lasagna, which will also be gunky. I mean leaves, weeds, lawn clippings, garden waste, lots of decent cellulose plus stuff reasonably high in nitrogen.

If you lack enough green and growing stuff, try growing a copse of wattle trees just for your compost. These are especially good to bulk out compost where most of the stuff is kitchen waste. Make sure you cut back all the green stuff on your wattle at least every fortnight, or they'll turn into trees. Start harvesting when they get about waist high. Comfrey is another rampant grower. Make sure it doesn't become a weed. If you dig near it, it will. You can also just beg and borrow lawn clippings. (My mother had her offspring trained to donate all theirs to a grateful parent.)

By the way, if your citrus isn't breaking down, the compost may not be warm enough, or it might be too dry, so the citrus peel becomes hard and mummified and it'll take a decade or two to rot. If this happens, chop it up before composting. This speeds up decomposition.

Brown garden blues

Dear Jackie,

Our garden used to be really wonderful until last year, when everything suddenly went brown. I don't mean it all died. The leaves just shrivelled, and even though it has now mostly recovered, I'm afraid of it happening next Summer. Is there something wrong with my soil or what? Even though it was dry last year, my garden got plenty of water. I thought my fuchsias were dead for a while.

Elaine, Gosford, NSW.

Dear Elaine,

Last year was a heck of a season for 'red spider' or two-spotted mites. Usually rain kills most of them and keeps them under control, but there wasn't any, at least not here, so the numbers built up. Dusty leaves also inhibit the other predators that control them. The trouble is most people water the bases of plants, not the leaves, and not under the leaves either. A good rainstorm usually has a bit of wind, so the leaves blow about and get beautifully drenched and clean.

Next time, water under the leaves as well, or try a buttermilk spray of one part white flour, two parts buttermilk, and 50 parts water. You can also use an oil spray when the weather is under 24° C, otherwise new leaves and shoots can burn.

PS: Compost-fed plants are more resistant to spider mites, and gardens with lots of birds, predatory wasps and so on suffer less, too. I've found that lots of basil as a companion plant repels spider mites, but most of the mints seem to attract them.

A stella saviour

Dear Jackie,

We have three cherry trees that are supposed to be

cross-pollinators. They grow well, but in eight years we've had no cherries. Can you help?

Mark, Geelong, Vic.

Dear Mark,

Okay, my first question — have they flowered? If they haven't, it might be too warm for cherries (unlikely), or the flowers may be frosted off before they bloom. Move further north. But Geelong should be okay, so I don't think that's it. Or they may have blossom rot, in which case spray with Bordeaux at leaf fall and mid Winter.

If they have flowered, look for thrips next Spring. Try overhead watering to cut down numbers if you find them. But sadly, often you buy trees as cross-pollinators, then find they don't flower at exactly the same time, and if they don't, then they're not cross-pollinating.

If you want to persevere, try Stella. She's a lovely cherry, but also self-pollinating, and needs less chilling than most other varieties. If she fruits and the others don't, then you know it's a pollination or maybe a chilling problem. But maybe with her around, the others will fruit too.

Chooks, snakes, and flowers

Dear Jackie,

We moved onto our property of 30 acres in November 1997. We will not be completely Green (we will have electricity), but we will be doing our best to provide our food and income from our block.

We have planted our orchard which we will be adding to as time goes on. When we return from a short holiday we will be starting our vegie garden. This brings me to the first of my two questions.

I want to have chooks but I have been told that they will bring snakes (we have black and brown snakes). I would like to have the chooks free range or in a movable pen for fertilising. Is there some way of protecting them? Or would I be better off with ducks or geese (when the dam is full)?

Secondly, I would like to grow proteas for the flower market. I have done some research in gardening books, and have found there are some varieties that suit our soil



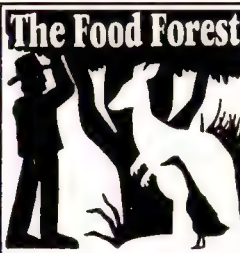
GRAMPIANS
serving the Wimmera-Mallee area

**SOLAR
WIND
HYDRO**

**Design and Installation of
Alternative Power Systems**

- SEIAA Accredited
- Registered Electrical Contractor
- Solar Hot Water

Phone: 014 469394
PO Box 820 Stawell 3380



The Food Forest
Farm Forestry
4 day residential June 13,14 & 27,28

Spring:

- Planning your Property
- Fruit and Nut Growing
- Bush Tucker
- Organic Vegetable Growing and Free Range Poultry
- Compost Toilet & Reed Bed System

Full day practical courses taught by Graham and Annemarie Brookman and guest presenters at

"The Food Forest"
a 15 hectare permaculture farm on the Gawler River.
PO Box 859, Gawler, SA, 5118. Ph 0885 226 450

Permaculture Design Certificate Course Summer '99

and climate. I have some test plants in now, and come Spring I should have some idea about their success. I would like to know of a good book or a grower from whom I could get some information about them.

Carol, Gin Gin, Qld.

Dear Carol,

Don't worry about the chooks attracting snakes. You'll attract them anyway, with or without chooks! Snakes come after the rats and mice attracted by chook feed, and if you feed your chooks scraps only in the morning before you let them out, and have a hanging feeder with tray below to catch spills, you shouldn't have rats or mice. (We have masses in our sheds, but none in our chook pen, because there's no cover for them to nest there.) Make sure your chook pen can be cleaned easily.

Snakes also like eggs. We've had one dropping by for a snack all through Summer, but I don't think it was attracted by the eggs. In fact the snake's been in residence for at least the past six years, and has only just discovered the chook pen. Rats and mice however love house roofs, rubbish bins, dog and cat food *et al*, and where you get rats and mice — or nice thick gardens for lizards and frogs — you'll get snakes too.

The best I can suggest is paving all around the house so at least you see the bastards before you tread on them. Just think like a snake, and make sure you don't have any hiding places like clusters of pot plants too near the front or back door.

By the way, there is *no* plant that repels snakes. I've tried all I can think of. Apparently in some places in Asia, a dusting of sulphur is said to work. I have neither proved nor disproved that yet, but I'd be grateful for feedback.

As for protecting the chooks, the main threat is foxes. You might try sticking them on an island in the dam, or hope the foxes only come out at night when you lock them in. This is what they will do until the fox population and feeding pressure rises, and then they'll come out at any time of day, especially females with cubs.

We also have a 'chook door' halfway up the wall of our chook shed, with a perch about half-a-metre on either

side. The chooks can fly up to the perch, then through the window to escape from the fox, which of course can't fly. This means that the chooks have a safe refuge all day. That's if they have enough sense to use it. All too often the fox takes them by surprise.

Maremma dogs are also highly regarded as chook watchers, but you have to bond them to the chooks, not you.

Ducks are actually more vulnerable to foxes than chooks are, even though they can retreat to the dam, or at least we've always found them so. Maybe other readers have a different experience. Geese are fairly fox-proof once they're fully grown, but the goslings are very vulnerable, and so are the geese when they are sitting, unless you are prepared to coax them into an enclosure to sit (very difficult) or build an enclosure around them, and risk being attacked by the gander for daring to go anywhere near his consort.

Re the proteas, first find your market. Selling the things is *much* harder than growing them. There must be books on growing proteas, but I don't have one — we only have about a dozen proteas here. Ask at your library.

But the actual growing is only a small part of the business. There is the picking, packing, transporting, selling, insurance and all the rest of it, so a course in small business would be helpful too. Also ask the department of agriculture for any booklets they have on commercial flower-growing. If anyone reading this can help, maybe they could write?

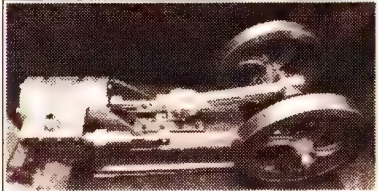
I'd also consider other flowers. Find the most upmarket florists you can, and have a chat to them. Florists love the new, the exotic (and the absolutely perfect and the long-lasting), and you may find other plants that also do well in your area. (I saw a gorgeous commercial flower arrangement the other day, mostly composed of loquat leaves and rushes, with a very few white lillies.)

I'd grow a trial of a few bushes first, rather than risk money with a large planting before I knew if they'd be perfect, blemishless and reliable. And I'd also try half-a-dozen other florists' possibilities to see if they fared better. Good luck.



**The
Everburning Light®**
Level 1, 319 Parramatta Road,
Leichhardt NSW 2040
Phone/Fax: (02) 9568 5620
Antique, old and new Oil Lamps.
Shades, chimneys, wicks and spare parts.
Restoration, repairs and brass polishing.
Large range of Aladdin mantle lamps & parts.
We buy old Oil Lamps and parts.
Mail order service. Smokeless lamp oil.
Aladdin Oil Lamp Specialist

Strath Steam Full-size stationary and
marine steam engines
SYSTEMS START FROM for alternative energy
APPROXIMATELY \$6,000 systems and boats



**AS
FEATURED
IN
EG 89**

Rod Muller, Strath Steam, Taylors Lane, Strathalbyn, SA 5255
Phone 08 8536 2489 Fax 08 8536 2113
Email strathsteam@olis.net.au

These are a few of my favourite choux

The mother of all brassicas is thought to come from the Celts.

by Keith Smith

Artamon, New South Wales.

A THICK-stemmed plant with a rosette of fleshy, frilly, blue-green leaves, with a touch of purple, clings to the steep, rocky cliffs of the northern Mediterranean and Celtic Europe (Ireland, Wales, Cornwall and Brittany). It is also found in isolated habitats in southern England, such as on the chalk cliffs of the English Channel at Dover. This is the original wild sea cabbage (*Brassica oleracea*), a primitive ancestor of garden cabbages and all the vast brassica tribe.

There is some argument about whether brassicas were brought to Europe by the waves of Celts who invaded the Mediterranean in 600 BC and arrived in Britain in the fourth century BC, or if they found the plants already growing in their new homeland. Most European and Asiatic names for cabbages can be traced to Celtic root words, for example *kopf kohl* (German), *caboche* (Old French) and cabbage (English), while *kaulion* (Greek), *caulis* (Latin), *cal* (Irish), *kaole* (Breton), *kale* (Scottish) and *col* (Spanish) are related to the Celto-Germanic-Greek *caul*, meaning stem. Modern botanists generally agree that the brassica plants were already growing in western Europe by the time the Celts arrived.

Through a series of genetic mutations and later plant breeding over the last 3,000 years, the wild cabbages spawned an extended family of cultivated relatives, as different from each other as brussels sprouts, heading cabbage (about 500 varieties), Chinese cabbages, cauliflower, kale, kohlrabi and seakale. They vary in shape, colour and size, from modern compact 'mini' cabbages through up-

right flowering brassicas like broccoli to the giant Walking Stick cabbage of Jersey (see 'Walking my cabbage back home', EG 100, page 42).

Cabbages are especially popular in France (particularly in Celtic Brittany), where they are called *chou*, or *choux* in the plural. These are a few of my favourite choux.

Chou de Burghley (*Brassica oleracea* var *acephala*): This is a curious brassica, and one so uncommon that it might be extinct. Chou de Burghley is, or perhaps was, part cabbage and part broccoli. The small broccoli heads and cabbage leaves were ready to eat in Winter, and were said to be delicious.

"Chou de Burghley," wrote George Wythes in *The Book of Rarer Vegetables* (London, 1906), "was raised by the late Mr Gilbert, a good grower of vegetables, and is well worth room in all gardens." Richard Gilbert (1821-1895), gardener to the Marquess of Burghley at Exeter House, Stamford, Lincolnshire, also raised the 'Richard Gilbert' apple.

In *Jottings of an Allotment Gardener* (London, 1919), E T Ellis rated Chou de Burghley as a "remarkably useful French vegetable . . . The cabbage-like heads are at times small, but very good, and the same remark applies to the small broccoli heads produced in the centre." Seeds were last offered in Australia in 1957.

Chou moellier (*Brassica oleracea* var *acephala*): "This grows something like a kohlrabi, but has an elongated stem instead of globular [one]," wrote Sydney nurseryman Herbert J Rumsey in my tattered copy of *The ABC of Australian Vegetable Growing* (Sydney, 1917), adding: "It may be used as kale or sprouts, and gives splendid succulent feed for a cow".

More like a kale than a cabbage, marrow-stem is



Figure 1: Wild cabbage. *Cyclopedia of Horticulture*, New York, 1914.

WORMS

"BUCKET O' WORMS" COMPOST STARTER

A TEN-LITRE COLONY OF SPEEDY-BREEDING COMPOST WORMS WITH THOUSANDS OF BABIES AND EGGS; THE BEST WAY TO QUICKLY POPULATE YOUR COMPOST OR REIN WORM FACTORY. INCLUDES WORM COMPOSTING INFORMATION.

\$40 (OR 2 FOR \$75) *POST-PAID AUSTRALIA-WIDE

* (EXCEPT WA OR NT, ADD \$7 PER BUCKET)

MAIL OR FAX YOUR ORDER. INCLUDE CHEQUE OR CREDIT CARD DETAILS, NAME, DELIVERY ADDRESS AND PHONE NUMBER.

RIVERS PACIFIC (MAIL-ORDER WORMS)

48 DIAMOND CREEK ROAD, GREENSBOROUGH, 3088

FAX. (03) 9432 7444

better known in Australia and New Zealand as chou moellier (or moullier). It originated in the Atlantic coastal Vendée region of France, and was probably introduced from the Channel Island of Jersey. It looks like a smaller version of its tall relative, the Walking Stick cabbage, but has a fat, fleshy stem, and grows only to a height of 90 cm to 1 metre.

"The stalk is of solid, but sweet and juicy, pith or marrow," said F A Falkiner, editor of *The Australian Gardener* (Melbourne, 1916). "Chopped up, the cattle consume it with avidity, some of them turning from Mangels [mangel wurzel] and Beet, preferring the chou moellier. As a milk producer it is unsurpassed, and does not give any objectionable odour to the milk, like some of the other fodder plants." Chou moellier is also good human food when eaten young.

Seeds are available from Eden Seeds, MS 316, Gympie, Queensland, 4570; send a stamped self-addressed envelope for information.

Couve tronchuda (*Brassica oleracea* var *tronchuda*): This hardy plant, also called braganza, Portuguese or seakale cabbage, is native to the Mediterranean, and was mainly cultivated in France, Madeira in Spain, and at Bragança in northern Portugal. Surprisingly, couve tronchuda is now widely grown today throughout South East Asia, where it was introduced from Portugal and dispersed through the colony of Macao.

Couve tronchuda was introduced to Britain in 1821, and a dwarf form followed in 1822. Seeds were requisi-



Figure 2: Marrow-stem cabbage (Chou moellier). *ABC of Australian Vegetable Growing*, Sydney, 1917.

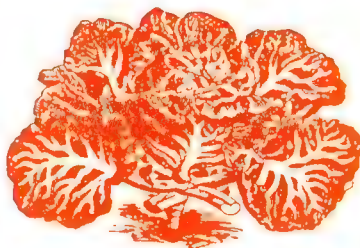


Figure 3: Couve tronchuda. *Beeton's All About Gardening*, London, 1896.

tioned for the Sydney Botanic Gardens by the Colonial Secretary of New South Wales on 20 September 1828. Called 'Braganza, or Choux trochado', seeds were listed in the 1835 catalogue of Flanagan & Nutting of London.

London nurseryman John Claudius Loudon, in *The Suburban Horticulturalist* (1845), thought couve tronchuda was "a delicious vegetable, much more tender than the common cabbage". It is a low-growing brassica, with spreading leaves. When mature, the broad, white, fleshy midribs of the large outer leaves are cooked like asparagus. The lower and outer leaves are picked first, shredded and used in soups or stir-fries, and the loose head is cut last and cooked like cabbage. Plants resist club root.

"It is fit for use, like Savoys [crinkly cabbages], after frosty weather sets in," said Beeton's *All About Gardening* (1896). "The heart may be eaten, as well as the leaf stalks, being tender when dressed, and of delicious flavour."

Howard Nicholson, of Bundanoon Village Nursery, PO Box 83, Bundanoon, NSW, 2578, sometimes has couve tronchuda seeds; send a stamped self-addressed envelope for information.

Growing

These three cabbage plants will succeed in good soil wherever cabbages grow well, and should be raised in the same way. Plant chou moellier in Summer, and keep pulling off the bottom leaves, which are tasty raw or cooked. Plants become woody with age. Sow seed of couve tronchuda in Spring, and thin to 60 cm apart.

EARTH BUILDING TECHNIQUES-

Boost your confidence. Gather practical skills. Talk with experts. See houses. Take home notes.

STARTING POINT Seminars on rammed/poured earth, berm, mudbrick, straw
June 13th & 20th or Aug 8th/9th

B&B accom available in superb earth house

Send for **STARTER PACK**- your guide to building an efficient house and healthier lifestyle-just \$35 posted.

Consultancy discounted to Starter Pack purchasers.

Ask Cherie

(03) 5968 1686

PO Box 222, Cockatoo, 3781



☉ Solar Heating for Pools (suitable for RAPS)

☉ Solar Powered Pool Covers

☉ Solar Panels ☉ Inverters

☉ DC Fridges & Freezers

☉ Telecom Batteries & Chargers

(03) 9830 4511 Melbourne (07) 5448 8304 Sunshine Coast

(018) 711 204 Mobile

In My Tropical Garden

My favourite season

by Liz Sinnamon

Kenilworth, Queensland.

Can you grow lychees? LAST season, the lychee tree set the best crop of fruit ever. The sweet juiciness of lychees is a wonderful treat: they taste a little like a prime Muscat grape. People often ask me if they are difficult to grow, and if they can be grown in southern climates. The answer is complex.

The lychee tree is native to southern China, and can live as long as 400 years! Trees are not hard to grow, but they are very finicky about climate. They don't like cold winds and will not tolerate wet feet. They love a long hot Summer, but need periodic cold between 1° and 4° C in Winter. These low temperatures cause the physiological changes required for fruit-bearing. Here in the hinterland of south-east Queensland, we do experience frosts in the Winter, plus warm to hot Summers.

I planted my tree about five years ago, but it grew very slowly for the first two years. A bit of research revealed that lychees need lots of heavy feeding during the first three to four years of growth. They also need lots of water during this period. I started fertilising the tree every month with a generous amount of good compost, plus a few handfuls of chicken-manure pellets. Each time I applied fertiliser, I gave it a good deep watering. This constant feeding resulted in the tree making lots of vegetative growth — it doubled its size each year.

There's another tricky thing about lychees. When trees are about four years old, they should only be fertilised once a year in the Autumn. This encourages the tree to flower in the Spring and not produce more leaves and branches. At the start of Spring, water should also be withheld. This stresses the plant, which puts its energy into fruiting. My tree fruited for the first time when about four years old, and the fruit crops should increase every year from now on. At about eight or nine years, fertilisation should stop altogether. A hungry lychee tree is one that fruits!



Lessons of the food forest

The food forest went a bit mad during Summer. Good regular rains caused an incredible growth spurt. A lesson I learnt about the food forest was to thoroughly research suitable trees before planting. I used 'Pride of Bolivia' — also known as *Tipuana tipu* — a legume. (It adds nitrogen to the soil from nodules on the root system.) I was under the impression that these trees would be relatively short-lived, and would probably only grow a metre or so high. The past two seasons have seen them grow like topsy.

The top branches now reach up to six metres, and they are still growing! I found out recently that they can live as long as 25 to 30 years. I guess the idea is to cut them back severely each year, and use the foliage for mulch or animal fodder. Several branches were shading the veggie garden, so I reluctantly climbed up and gave them a good trim. (Last year I had to dig down about half-a-metre and cut off several large roots that were invading the vegetable patch.) Lesson learnt: don't have the veggie patch near the food forest.

At the moment though, the garden is producing lots of wonderful Winter vegetables. French beans are quite difficult to grow here during the Summer months, so I'm enjoying large helpings of this delicious vegetable. I'm going to try the winged bean in Summer. Pests do not relish this tropical climber, and all parts of the plant are edible. In the northern tropics, the bean grows all year round.

I love Winter in this part of Australia. It's great to get a break from the mowing and weeding, and concentrate on the sheer enjoyment of gardening. I've just planted a bauhinia (butterfly tree), an exotic native that bears masses of very ornamental, large purple or pink flowers in long clusters. It particularly suits warm sub-tropical and tropical climates.

A job I'm tackling at present is sub-dividing the asparagus. I was given two plants of the variety 'Mary Washington' when I first came here 11 years ago.



Asparagus likes to grow in a bed of its own, so I planted it out in a special bed next to the vegie garden. Now I have a huge clump that is spreading rapidly. When the foliage turns brown in early Winter, I cut it down to soil level, and cover the bed with a thick layer of compost with plenty of chicken manure mixed in. Then I top it off with a layer of grass mulch.

The spears begin appearing in mid to late Spring, and I pick these for about eight weeks. Then I let the plants produce foliage. This enables them to store food in their root system until Winter.

When the roots (or crowns as they are commonly known) are fully established, they can be broken up into

several pieces and replanted. After looking around for a suitable place for a new bed, I decided to use a vacant area next to the chook run. This gets constant fertilisation, receives plenty of sunshine, and is close to the house. It's great for dashing out and cutting a few spears for dinner. I've just finished digging it over thoroughly, and have added lots of rich compost. I'll plant the crowns, mulch, water and wait for Spring.

Sexing pawpaw

Some time ago a friend sent me some female pawpaw seeds. Pawpaws need to be sexed, because only female plants produce fruit. I like to have one or two male trees to seven or eight females. The problem is that until the plants flower, there is no way of telling whether they are male or female.

But the seeds that were sent to me had already been sexed. Evidently seeds are placed into a jar of water, and the male seeds will rise to the top, allowing them to be skimmed off and separated.

I already have two healthy, well-established male trees, and was keen to grow more fruiting plants. I went ahead and propagated the seeds, and planted out six seedling trees last Summer when they were about 16 cm high. I waited patiently for flowering. Four turned out to be females, with two males! Can we ever second-guess Nature?

GENERATE YOUR OWN ELECTRICITY

- You might think it odd that **one of Australia's leading power companies** can be enthusiastic about people generating their own electricity – but it's true!
- At **Integral Environmental Energies**, we are specialists in the installation and maintenance of **solar, micro hydro** and **wind** technologies for remote area power supply.
- We can have an initial chat with you by phone – but really, we'd like to come out to your place, roll up our sleeves, pull on our boots – and do some walking. At **Integral Environmental Energies** we know that the right solutions come from on site assessment of the facts.
- Consultations are **FREE** and there's no obligation.

Freecall **1800 644 550**



WE THINK. WE'RE DIFFERENT.

**ROTA-LOO
COMPOSTING TOILET**

**What Goes Around
Comes Around.
It's Your Choice.**

Phone: (03) 9587 2447 or write to P.O. Box 611, Brideside, VIC 3195



At Least We've Started

Michael Uniacke continues his regular column on starting out on the long road to self-sufficiency

Now is the Winter of our content

I'M GLAD it's Winter. It's a time for chopping fire wood and collecting and storing twigs for kindling. It's easy to become busy outside, and it's also easy to curl up like a cat in front of the fire and do nothing. The risk of bushfire has gone, we've been getting a bit of rain, and swathes of green are coming back. Even the delicate emerging fronds of the wretched oxalis bring a smile to my face. Of course we make more plans. Some will get done, some will be forgotten, and others will stay in the gunnadoo file. Here is our report card.

Effort: 7/10. Michael and Shirl have shown considerable improvement this term. They have a remarkable ability to do quite a lot outside even if they are not quite sure what they achieved.

Chook shed: An extension on the extension on the extension on the extension on the due date to complete this assignment has been granted.

Compost: 5/10. Plenty of room for improvement. Compost is intended to produce nutrients for the soil, not to provide a medium for sprouting strange objects with small yellow leaves. 'Upsetting the worms' is not a reason for not turning over the compost.

Mudbricks: 8/10. Michael has achieved commendable results, and his down-to-Earth attitude has been used to inspire others.

Pests, precautions against: 4/10. A simple enclosure may have saved their capsicums from the rabbits. They should be aware that the desire for strawberries for home consumption is not compatible with a desire to provide a varied diet for the bird life. Confident of improvement.

Plants, identification of: 2/10. A poor effort. 'Weird green stuff' and 'Funny-looking round yellow things' are not acceptable nomenclature. It's pelargonium, not pergolarnium, and "What the Jeff is that?" reveals a disappointing approach to the spirit of scientific enquiry.

Planting: 8/10. Doing well. Jasmine, lemon ver-

vena, basil, parsley and assorted herbs all satisfactory. Shirl's front garden beds deserve commendation.

Planting dates, knowledge of: 3/10. A disappointment. Corn is not to be planted in January. They plan to put the cornstalks in the compost, so perhaps all is not lost.

Pond: 5/10: A bare pass. Their intention to allow the site to 'revert to Nature' and 'blend with the environment' has merit, but they must understand that ponds are intended to have water in them.

Worms: 0/10. Failed to complete assignment. There is more to worms than dumping an ice-cream tubful into the compost. Their excuse, that collecting evidence to prove the worms were thriving would disturb and upset them, was not accepted.

Enthusiasm: 9/10 Excellent. Despite some erratic practicality, they keep trying and planning. Would perhaps benefit from a 'whole-of-garden' plan.

We shall be moved

Gum trees surround our place, and a couple of them overhang the house. One recent windy afternoon, a dead limb dropped and punched a hole in a skylight out the front. With this chilling reminder of the power of gum trees to deposit from on high, and with a new deck going up, something had to come down. We arranged for a visit from a local tree surgeon.

Of course it was unpleasant to contemplate felling a tree. However the tree expert pointed out some obvious signs of wear and rot at the base of two of the trees — long, large cracks, thick, peeling bark, and deep holes from borers. Naturally I'd been aware of these, but assumed they were a sign of graceful ageing, like hon-





ourable wrinkles earned in life's battles. The tree expert however said it was pretty terminal.

"Could easily blow over," he assured me. "Straight onto the house. Smash through the middle." I could certainly imagine that. "Thousands of dollars of damage. Kill someone, even," he continued, cheerfully flapping his hands in a mime of a tree crunching a house. I didn't say much. I was curious to see if he'd keep going with these escalating disasters until he got to something like, "... the end of Western Civilisation, 'smatter of fact". Unfortunately he didn't, but in our minds he turned the gentlest puff of a soft breeze into an ominous portent.

Eventually we hired two men in a cherry picker. They soon reduced two large trees to a chest-high pile of logs, leaves and branches. I spent the afternoon stacking thick

logs and pretending to be one of the labourers who built the Egyptian pyramids. Physically it was satisfying; I was unbeatable at squash that night. But it was also distressing — the trees, not the squash. Those trees had been around for far longer than we had. The angry buzz of chainsaws, like demented wasps on steroids,

If I were you Michael...I'd forget jackhammers and go back to large mallets!!



SLOW COMBUSTION STOVES and HEATERS FULLY RECONDITIONED

*Everhot *Rayburn*Wellstood

RECONDITIONED STOVES &
SPARE PARTS AVAILABLE

•Aga wood conversion kits•

Other brands also available, Prices from \$600 to \$1,800. Spare parts for all makes of stove. Check out our flue kit prices. **TRADE-INS WELCOME.** Freight to and from anywhere in Australia. Contact:

SCANDIA

1 Melbourne Crescent, Seymour, 3660. Ph: (03) 5792 2388



seemed such a crude way to cut them down. But what else can you do?

One of the trees was very close to where a possum lived. Shirl would feed it pieces of old fruit. We hoped he'd be all right. I told one of the tree fellers, who pointed out the possum tracks up a tree next to one that came down. He thought the possum would be fine.

At least I've now planted four new trees out the front.

All feet on deck

We now have a new deck, thanks to Richard, our builder (see 'Operation Clearwater Revival', EG 97, page 66). It's huge. It starts at the back, goes along the north side of the house, and then spreads out. There's also a pergola. I didn't have the free time to work with Richard as much as I wanted to, but I tried some of the tools he used, like a jackhammer. The experience left me quite shaken. (Sorry.)

The deck is so large we're calling it the West Wing (the back) and the North Wing (the side). It's given us a lot of outdoor living space. There's always some area that gets plenty of sun. Now we're working out what vines to grow up the pergola, and how to landscape the surrounds. And more good news — our possum has returned. We spotted it several times, using the top of the pergola as a freeway and launching pad to his tree.

Me and my URL

It was a dark and stormy night when I was cruising the Internet. I say cruising rather than surfing because you can go anywhere when cruising, whereas surfing takes you in one direction only, and is liable to dump you. And this particular night was neither dark nor stormy, but like Doug Falconer, EG's ad man, I've always wanted to start with a sentence like that (see Doug's story in EG 100, page 20).

Back to the point. I came across a fab site that was all about energy-efficient building. This gave a lot of useful advice for checking homes, for example the duct system for leaks. It described special ways of joining exterior and interior walls, and corners, and how to avoid unnecessary gaps that cannot be insulated. And insulation in roof cavities is worth checking every now and then. These tips came from a useful American publication called *Home Energy Magazine*. Now, who wrote such clever articles? Who was the brilliant author with such a passionate commitment to energy conservation? Who is this most worthy candidate for EG's Person of the Year award? Michael Uniacke.

That was exactly who, and it wasn't me. May I introduce Michael, my American *doppelganger*? He is a carpenter and diagnostic technician who runs an educational consultancy in Arizona. He shows builders, architects and consumers how to build homes that are more efficient at conserving energy. He's on a conservation board and he's chaired a conference on energy-efficient building. He sounds like an extremely nice person. And I bet he's tall, dark, and handsome.

Build a mudbrick beehive oven

Andrew Hogarth and his backpacking guests now enjoy exotic pizzas thanks to the mudbrick oven he built. It didn't take long . . .

by Andrew Hogarth

Lune River, Tasmania.

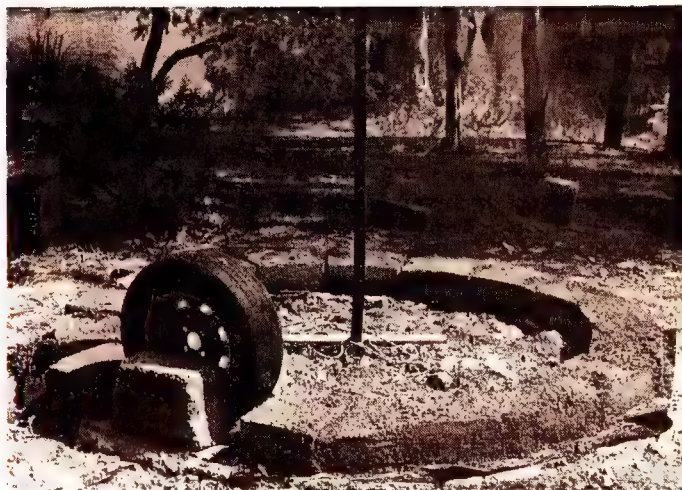
A COUPLE of years ago I completed an adult-education course on baking in a beehive oven. During this course we cooked pizzas and baked bread, and were told of the numerous other delights we could cook. I own and run the Lune River Youth Hostel and Backpackers (set at the edge of the South West National Park, near Hastings cave in southern Tasmania), and every month we have a full moon feast. We planned to have regular Saturday night pizza and bread-making evenings, and I decided an oven would be a novel addition to the hostel.

I found plans by Rob Bakes for an oven on page 47 of *The Earth Builder's Handbook*, and started. I drove an old star picket into the ground, got a short piece of rope, and marked it off at 820 mm and 1220 mm, and using the star picket as a guide, drew two circles of these diameters. I then dug the footing between the two circles to a depth of 200 mm, put in some trench reo, and using some old mudbricks as formwork, poured the footing.

Bricks

The next thing was to make some bricks. An engineer passing through the hostel had told me about a new method of forming bricks, and I was keen to try it. In this method you get clayey road gravel and mix it at 10:1 with cement, and put the bricks where they are to stay. I made up two mudbrick moulds, one a wedge-shape and one a standard rectangle.

Once the footing had cured, I put some damp course down, put a 13-inch tyre in place for the wood storage door,



The first course, with the tyre in place for the wood storage door.

and put my mould in place for the first brick. A local quarry delivered some gravel which I had checked out. I fired up the mixer and made a stiff brew. Using a tape measure from my star picket, I set the mould at 900 mm (to the inner brick edge), and shovelled in the mix. I flattened it off, and then pulled the mould off and moved it round the circle. I found I would get three bricks per mix.

Once I had done one round back to the tyre, I made a sloppy mix and filled in the gaps between the bricks which I set at about 50 mm. By the time I had done this, the first brick was set enough to start again, and I was away. On the first day I did three layers, and if not for family commitments I would have set up lights and continued on.

Next day I went back, and was so happy that I could walk around the top of the bricks; they felt solid. Over the next couple of days I finished the vertical wall and the arch, which I built from pre-made bricks from my second mould. I dropped the door specifications in to a mate who was a welder. He found some old corrugated iron and cut it to the shape of the oven base, and propped it to take a 5-inch (125 mm) thick concrete slab. I then made another mix, and around the outer edge of the top layer, formed a 5-inch high by 4-inch wide (125 mm by 100 mm) wall to contain my concrete slab. Once this had set, I poured the slab and put some reo in for strength.

The dome

During the four days it took the slab to cure, I made up lots of wedge-shape bricks for the dome. Using a dome gauge, I started layering after having set the door in place. The bricks get progressively steeper and steeper, and I had to cut props to stop them from sliding in. When I got to the top of the door, I placed in the lintel I'd had made up. Finally I got to a point when I was standing with mudbricks



A few more courses and it's looking good.

all around and nowhere to go. I got out over the top, and then placed and propped a circle of ply into the hole. Leaning a ladder against the side of the dome, I poured the top section. Once this had set, I pulled out my props, cleaned up inside, and filled in any gaps I'd missed. I rendered the outside with a mix of fat, sand, cement, Bondcrete and colouring, and waited for the oven to cure.

Once it had cured we put a large fire in the centre towards the back of the upper section, and let it burn for an hour or so while we prepared pizzas and bread. The first pizza out was an oyster one, followed by crayfish and vegetarian ones, and a few loaves of bread. It all tasted great!

At the time of writing this article we are planning to fire it up again for the next full moon party. We plan to bake three or four Atlantic salmon and potatoes and pumpkin, as well as buns and bread. We also hope to run some adult education courses on baking in a beehive oven and building with mudbricks.



Just the top bit to do.



A large vegetarian coming up!



Planet Natural

Born from a need to treat ourselves and the Earth with greater respect.

Planet Natural offers an exceptional range of environmentally based products for every occasion.

- Personal Care • Environmental Health • Books and Music
- Hemp and Organic Cotton Clothing • Solar and Alternative Energy • Natural Paint and Wood Finishes

Mail order available

Serving our Community, Supporting our Environment

154 Main St., Mornington, VIC 3931
Phone 03 5977 0122 Fax 03 5977 1640

There's something in the wind...

AIR Wind Generator



- 22 Amps in 24 kts Wind Speed!
- Starts charging in a 6 kts breeze.
- Weighs only 6kg.
- 3 Year Warranty

For more information - call...

Precision Wind Technology
 Authorised Distributor

Ph: 0411 22 4807 Fax: (07) 5598 1710
 P.O. Box 147, Tugun, Qld. 4224

THE Good Life

THE NEWSLETTER FOR BOOK LOVERS

BOOK CLUB



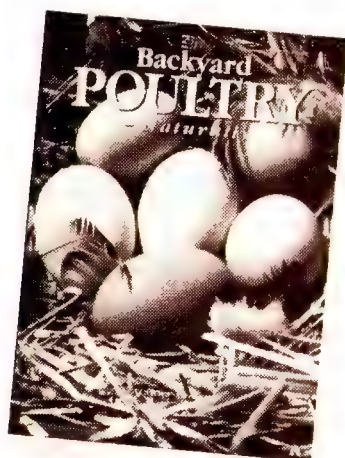
WINTER/SPRING 1998

▪ CHOOSE FROM OVER 100 BOOKS ▪ BONUS GIFTS

THREE PREVIEWS (AVAILABLE NOW)

FROM OUR SPRING CATALOGUE

**AUSTRALIA'S
NO-OBLIGATION BOOK CLUB
FOR SIMPLER, HEALTHIER,
GREENER LIFESTYLES**



BACKYARD POULTRY - NATURALLY

Brand new Australian book by Alanna Moore. Covers all breeds, housing and feeding requirements, breeding, poultry and permaculture, natural poultry health, and produce. A wonderful resource . . . provides poultry enthusiasts with all the information they need to raise healthy poultry, without using harmful chemicals. 152 pages, photos and illustrations.

Price: \$26.95 + \$8 postage and handling.

The Cob Builders Handbook by Becky Bee

You can hand-sculpt your own home, shed or cabin with help from this brand new book. We've searched far and wide for a book on cob: the appeal of making mud pies till you end up with a home is not hard to understand. The book presents practical, no-nonsense advice in with clear illustrations.

**\$39.95 + \$8 postage
and handling.**

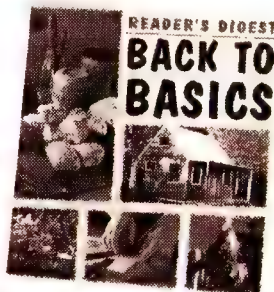


Back to Basics

A practical guide to old-fashioned self-sufficiency

This book is a complete, practical lifestyle book about recapturing the common sense of less complicated times. Jam-packed with fabulous colour drawings and photographs. Each idea and project is clearly laid out — a joy to study. The book is divided into six parts: land and house; energy; food and livestock; enjoying your harvest; skills and crafts; and finally, recreation. 100 per cent practical. Everything granny and grandpa forgot to tell you — 464 pages long!

\$57.00 + \$8 postage and handling.



**SELF-SUFFICIENCY ▪ ORGANIC GARDENING ▪ PERMACULTURE
OWNER BUILDING ▪ HEALTHY CUISINE ▪ ADVENTURE TRAVEL
ENVIRONMENTAL ISSUES ▪ ALTERNATIVE ENERGY
HORTICULTURE ▪ RURAL LIVING**

**MEMBERSHIP HOTLINE: Phone (03) 5424 1814
TO RECEIVE YOUR FREE CATALOGUE AND MEMBERSHIP**

Get on your goat

Of course goats are capricious. That word comes from their Latin name, *capra*. However as Ann Cliff describes, goats have a very useful place in the Earth garden.

by Ann Cliff

Hill End, Victoria.

Some people hate goats because they create deserts, eat the washing, destroy the garden, go on television and eat the script (I saw it happen). On the other hand, some people love goats, and I'm one of them. Goats are demanding, intelligent, affectionate and adventurous. Is there a place for goats? I think there is. These creatures have been small enough for most people to own, and have rarely been caught up in big business. Goats have always been 'alternative', and they have many roles.

While all goats have common characteristics, the breeds differ considerably, and you will need to do some research before acquiring a goat. The first consideration is whether you have the resources to meet the goat's expectations. These are quite high! Then we can look at what goats can do for you, and how they can fit into your own environment. Goats *can* create deserts, but only if their owners allow that to happen.

Need

Some of the things goats need are similar to what sheep and cattle need, and other things are peculiar to goats. They need company and the feeling of belonging to a herd, which can mean that you are the herd leader. They make good companions for other animals; nervous horses sometimes have a goat as a stable companion. You really need to keep at least two goats, but one will be reasonably happy with a collection of other creatures.

Goats are mountain animals. They are designed for skipping about high rocky precipices, and are ready to



Goats enjoy the company of other animals.

challenge ordinary fences and try new experiences. So fencing has to be tough and high. Goats can be trained to electric fencing, and this is more flexible because it can be moved.

The paradox of goats is that although they are hardy and tough, they hate wind and rain, and need shelter. Make sure that goats can get under cover from extremes of temperature, fierce sun, wind and rain. Shelter is especially important when the females give birth to kids.

Goats need plenty of *fibre*. This does not mean bran, but branches — tough leaves, twigs, stringy weeds, thistles and blackberries. Goats are browsers, not grazers, and although they eat grass and hay as part of their rations, they need coarser feed than cattle or sheep. Like deer, they prefer to nibble here and there on a variety of trees and shrubs. This means of course that if they roam through the bush they can wipe out the understorey if you're not careful. But it also means that they are excellent recyclers of the type of weeds which many people think can only be killed by poisons.

Fibre is most important. I have seen goats tethered in grass paddocks without a twig in sight, and they were not happy because their metabolism depends on a high-fibre diet. If you have no patches of rough weeds, there are still plenty elsewhere, and you can forage for your goats the way we did when I was young, bringing back fibre for them from roadsides and other people's land. You can also walk them on a lead and let them browse by the wayside, as long as you keep off the neighbour's shrubbery. It is interesting to see what goats will choose to eat when they pull you along on the end of a lead.

Another characteristic of the *capra* tribe is their fastidious approach to food and water. They like these fresh

and clean, with a very high level of service from you. In return, goats will reward you by a flattering desire for your company. Goats seem to like people very much, whereas sheep and cattle often only tolerate us. So goatkeepers give the animals what they will eat in a day, and serve up a fresh helping the next day if the goats are not foraging for themselves. If you keep a milking goat, you will need a clean area for milking, and a platform will make the job easier.

The rewards

Weed control: These days this is a significant reason for keeping goats on some farms, with other produce as a minor consideration. However in an integrated system, your goats can cheerfully perform this function while giving you milk, meat and fibre, or a combination of these. Goats will eat just about every weed except poisonous ones such as ragwort. Sheep farmers sometimes run goats with the sheep in order to control the weeds which contaminate the sheeps' wool with seeds or prickles.

Goat milk: A milking goat will probably be a bony animal with a fine coat. It may be one of the milking breeds such as Saanen, Alpine or Toggenburg, all Swiss breeds. The milk is higher in fat and protein than that of cow's milk, but is easier to digest

because the fat globules are small. You can expect four or five litres a day as a peak yield from the goat. She may continue to give milk for up to two years after kidding, so you may not need to have her mated every year. A milking goat will need a commitment from you because she should be milked twice a day at regular times. This is easier when a family or group can share the work.

When the goat has a kid, she will need some of her milk for feeding the kid, and the rest may be enough for your family. From the surplus milk you can make yoghurt, cheese or butter. If you have enough time and space for several goats, you could develop a line in milk sales. Hospitals sometimes need a supply of goats' milk for patients with digestive and allergy problems.

A milking goat will need feeding well. Some form of grain such as oats will make a good supplement.

Meat: A recent introduction to Australia is the Boer goat from South Africa. This breed is being kept commercially and raised for meat production, and markets for the meat look promising. But many goatkeepers rear kids for meat as part of becoming self-sufficient, and these kids may be any breed. Goat meat is lean and cheap to produce, and is a good idea for families that can accept the idea of growing their own meat.

Fibre: There are two types of goat fibre. One is mohair from the Angora



Ray and Shirley Keon with one of their male goats.

HAVE YOU GOT CROOK TANK WATER?

CONTACT

SAFE RAIN
CONSOLE & RAINWATER CYCLES ON

PO BOX 298
BLACKBURN
VIC 3130

Ph: (03) 9894 3302

**3 MODELS TO
SUIT ALL PIPING**

At certain times of the year organic matter and other materials will accumulate at the lowest point in the system (arrowed below). If not flushed out regularly, fermentation can occur. The result? At the next rain, this body of stagnant water can taint a whole tank making it undrinkable. A SAFERAIN unit attached to the riser (pictured right) will dump this bad water and then divert the following clean water to the tank automatically.

IS YOUR PIPING UNDERGROUND?

AMCER

**IF THERE WAS AN
AUSTRALIAN STANDARD
FOR EARTH BRICKS
THIS COULD BE IT!**

03 9436 1049

Earth Brick Sales
Earth Brick Laying Supplies
Earth Brick Making equipment
Earth Building Design & Consultation

AMCER Pty. Ltd. (A.C.N. 006 368 216)

223 YAN YEAN ROAD, LOWER PLENTY 3190

goat, a docile little creature with curly locks and floppy ears. The Angora is easier to control than other breeds.

The other fibre is cashmere, produced from the fine undercoat of goats which do not produce mohair. An Australian cashmere industry has been started from our feral goats. These 'wild' goats are descended from those brought here by the early white settlers. But the cashmere goat is now just about a breed, because animals have been selected for fibre production.

Goat fibre has gone through a boom-and-bust cycle around the world, and is re-establishing, so prices of breeding animals are now within reach.

Ray and Shirley Keon of Gippsland, Victoria, have kept cashmere goats for some years. Shirley says that their main job is weed control for the sheep flock (they are Texel breeders). But the Keons shear their goats every year, and say that the price for the fibre is equal to that for fine wool. Cashmere is great for self-sufficiency. Shirley spins and knits the attractive, soft fibre, and makes cashmere sweaters.

Breeding

The length of pregnancy for goats is 150 days. The breeding season is in the Autumn, when females come into oestrus and will accept the male at 21-day intervals, if the females are not pregnant. Find someone who keeps a male goat, and arrange for your female to pay a visit.

What is the best way to integrate these creatures into

the Earth garden? Goats will do best if confined to a fairly small patch of rough land, with access to water and shelter. You need to allow for moving them on before they eat out their surroundings, and to prevent a build up of parasites such as intestinal worms.

There is room for a goat in a large garden, in a big pen with shelter, and with food from outside. A penned goat will need exercise — perhaps walks on a lead. Fibre goats will at least pay for their food with fibre for spinning, and milking goats will recycle weeds into milk.

Obviously, avoid letting your goats loose in the neighbourhood. Inevitably they will get you into trouble by eating something like roses or other people's washing.

Tethering is quite common, and solves some of the problems. You can tether a goat in the garden to eat weeds, for example, and their droppings enrich the soil. But tethering can be cruel.

Don't leave a goat on a tether for long periods, especially if you are not there to keep an eye on it. Use a collar or harness with a swivel attachment, and make sure water and shade are within reach.

Goats can fit in to a system when people have some time to spend with them. They are especially useful where there are large patches of weeds. Goats are small, so children can look after them under supervision. But don't keep a goat if you are away from home a lot, because it won't be fair to the goat.

Full 2 year warranty

NARA



The Australian

HOME FOOD DEHYDRATOR

FOR FREE BROCHURE CONTACT:

Nara Products, PO Box 4, Torrens, ACT 2607
Phone/Fax: (02) 6286 8811

S.A.	Basically Healthy	(08) 8538 3072
Vic	Bendigo Health Foods	(03) 5443 1910
Melb.	Going Solar	(03) 9328 4123
W.A.	Green Earth Herb Nursery	(08) 9524 1251
N.S.W.	Healthy Life Wagga Wagga	(02) 6921 3998
	Wollongong Hydroponic Centre	(02) 4225 8773
	"Cooroonya" Products Nimbin	(02) 6689 1809
	Go Vita Health Foods Ulladulla	(02) 4455 3565
	South Pacific Hydroponics	(06) 239 2598
A.C.T.		
Qld.	T&C Marketing Brisbane	(07) 3206 6293
	Curry's, Cairns	(07) 4031 1581
	Margate Health Foods	(07) 3283 2334
	Warwick Chapman's Store of Health	(07) 4661 3813
	Curry's, Townsville	(07) 4721 5000
	Curry's, Mackay	(07) 4953 3349
	Jonel Farm	(070) 938 771

Wholesale and dealer enquiries welcome - Trade only (018) 633 165

'Simply Dried' - A guide to Home Food Drying \$8.50 + \$1 postage



EARTH GARDEN NATURAL DOG SOAP

Sick of your favourite hound scratching to death because you refuse to use strong chemical flea controls? Yes, we know — the cure's worse than the disease.

The answer is *Earth Garden* natural dog soap. Made from 100 percent pure natural ingredients.

It works — we use it on our dog.

3 cakes of soap for \$8.95

plus \$4 postage

Orders: Earth Garden, RMB 427 Trentham, 3458.

Killing weeds with water

Next time your local council tells you there's no alternative to nasty chemical sprays to control weeds in your area, tell it to get a Waipuna system.

CAN you kill weeds with water? The answer is yes, by using the Waipuna system. In 1989, Graham Collins resigned from the New Zealand Labour Department, where he had been responsible for hazardous substances. He and a colleague, Richard Newson, decided there must be a way to reduce the use of toxic chemicals in vegetation control in the urban and rural environments.

So began four years of research and testing, with everything from dog urine to tree bark extracts. In 1990, a visit to the dentist proved to be the breakthrough. Dental instruments being sterilised in boiling water gave Graham some ideas for a solution.

Following several months of research into the principles of thermal physics, the pair tested their first prototype. The results were sufficiently successful to prove that the principle worked. However it took seven further prototypes before their invention was ready to be revealed to the world. In 1992 a joint-venture company was formed — Waipuna Systems Ltd. The name 'Waipuna' comes from the Maori word for 'pure spring water'.

The Waipuna system controls the growth of various plant species in urban environments. These vary in type and growth patterns, depending on their location. The system kills the weed plant by penetrating its cellular structure. The combination of heat, pressure and volume of water breaks down the cellular structure of most common soft-tissue weeds, killing them immediately by virtue of the hydro-thermal process.

The system uses a self-contained, computer-controlled unit mounted on a vehicle. The operator applies the super-heated water using specially modified hoses and spray lances, spraying directly onto the weeds. The Waipuna method can be used where chemical weed killers are potentially hazardous to both operator and public, for

"The system kills the weed plant by penetrating its cellular structure."

example, when spraying in wet or windy weather, without the dangers of spray drift. There is no surface

residue or chemical run-off into drains, streams or eventually the ocean. A longer-term benefit is that the weeds cannot build up a resistance to the Waipuna system and hot water.

Vegetation Management Systems (VMS) is the Victorian distributor of the Waipuna system. VMS supports a safe alternative to chemical spraying to reduce the harmful effects of pesticides and



Urban weeds before spraying with the Waipuna system . . .

herbicides on the environment.

The Waipuna system has also proved effective for other uses:

- removing chewing gum from footpaths and paving
- cleaning public toilets and paving stones, and
- removing algae, moss, mould and slime.

Support

VMS and Waipuna support AGENDA 21, the result of the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. This is a plan



... and one day later

Not ANOTHER
cuppa, Richard?

Nah...getting
ready to
start work!



MORE THAN 180 COURSES

- Herbs
- Healthy Buildings
- Organic Growing
- Human Nutrition
- Crops
- Poultry
- Alternative Farming
- Native Plants
- Horticulture
- Business
- Writing
- Photography

**Advanced DIPLOMAS
and CERTIFICATES in**
• Horticulture
• Agriculture
• Fitness & Health
• Crops • Herbs
... and more

PERMACULTURE
Certificate and
Advanced Courses
Accredited by VETEC.
Perm. Institute
Certificate

- Enrol any time
- Work at your own pace
- External studies

AUSTRALIAN CORRESPONDENCE SCHOOLS
(Est 1979)

264 Swansea Rd, Lilydale 3140. Ph: (03) 9736 1882
P.O. Box 2092, Nerang East, Qld 4211. Ph: (07) 5530 4855

**Courses accredited by VETEC
and AUSTUDY APPROVED**

VIDEOS

- Plant Identification
- Herbs • Propagation
- ... and more

\$34.95 ea. INCL. POST

of action to guide the world towards a sustainable society, one in which we think not just for ourselves, but for all our fellow human beings, now and in the future.

Chemicals which remain active in the soil for years, seeping into underground water reserves, and herbicides, which wash through stormwater systems and out into rivers, harbours and coastlines, go against the aims of sustainable development.

The human and environmental damage, plus a growing resistance to chemicals from some weed types, prompted Waipuna's search for alternatives to support the environment and stop the contamination of the Earth's atmosphere and water.

• For more information about the Waipuna system, or other States' distributors, contact VMS at Suite 102, 17 Heatherdale Road, Ringwood, Vic, 3134; phone (03) 9874 5100; fax (03) 9872 5588.

WATERLESS TOILETS

**EASILY INSTALLED
ANYWHERE**

Approved by Health Commissions and the E.P.A.



NEW

**Domestic model
now available**

Please send more information to:

Name

Address

Postcode Phone

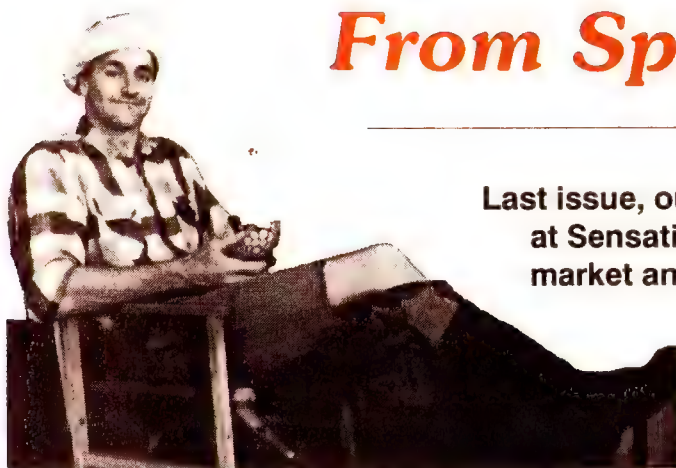
CLIVUS MULTRUM AUSTRALIA

Melbourne Office	Brisbane Office
P.O. Box 189	115 Railway Ave
Bentleigh 3204	Strathpine 4500
Ph: 03 9557 6943	Ph: 07 3889 6144
Fax: 03 9557 4786	Fax: 07 3889 6149

COMPOSTING TOILET SYSTEMS

From Spade To Blade

Gary Thomas's Garden Recipes



Last issue, our intrepid adventurers enjoyed a fish pie at Sensational Point before setting off for Eumundi market and a barbecued vegetable salad for dinner that night. Now read on . . .

The foods of sex and love, part 2.

After ruminating on a peach tree and a single, perfect, peach, Gary Thomas shows how to prepare a special dinner to share with a beautiful person.

TRUDI planted a peach tree at our place five-odd years ago. It was the first, and remains the only, peach tree planted here. I immediately claimed that it would do no good in her chosen site and for the next two years the tree supported me whenever I pointed out its lack of progress. Then, in the third year, the peach developed curly leaf. It was devastated. At the end of Summer a paltry half-dozen leaves struggled to support the whole tree. Our advice said there was nothing we could do 'right now', but effective chemical strategies awaited us in the Winter months.

These passed by, and we were busy with other matters. Our peach tree's fourth Spring began with promise. Quickly that promise failed when the curly leaf sprouted. I don't know quite what was wrong with us. Why couldn't we get this tree organised? We simply couldn't, and once again the curly leaf ran rampant. Again we got professional advice, the same we'd had 12 months before, and it still wasn't satisfactory. We were still unmoved to action.

The tree finished the Summer again bereft of leaves. Even more disconcerting, some of our other fruit trees showed signs of contamination. This passed us by. We were packing the car, preparing for a Winter of touring around our northern States. We lived each day as it presented itself, we had not time for an investment in a plant's future.

And then we were home again, and it was Spring, and that peach sapling was starting to look like a proper tree at last. And its leaves looked robust and real. And I opened one eye from its position deep within the sand, and tentatively paid attention as the twigs sang, "Look at me, I'm a limb". And I paid attention. I paid attention as the leaves unfurled, and I paid attention as those leaves withered, blistered and curled.

And once again I got professional advice which said,

again, "Curly leaf won't hurt the tree, spray in the Winter". This time I paid attention and decided I would take control, even though the tree was planted in a position I couldn't respect.

As that curly leaf unfolded I removed it from the tree. No, it didn't really take long at all. I did it maybe four times, a few minutes at a time, over a couple of months. I did it to a couple of other likely looking trees as well, and threw those pesky leaves away where they couldn't do any harm any more. And the tree completely blossomed. And it grins at me every time I walk out the back door. And I must admit it looks lovely.

A peachy sort of day

So why do I bring it up now? Well, this small tree grew one perfect peach this year. Our first peach. It was a huge peach, the kind of peach I see for sale in the shops and assume must be pumped full of chemicals and water. This peach, our peach, has been tantalisingly close, available for view through many windows, yet steadfastly chaste, green, unripe. Until today. Today I was explaining the story of our peach tree to some sceptical visitors. Trudi took its weight into her palm. The peach nestled there. Today, the peach let go and settled there. Today, we have cut that peach into six and eaten it. Today is a good day to talk about the foods of sex and love. Today, we will cook a meal like this.

But I'm getting a little away from myself here. Let's say I've met that



person with the shapely jib and have felt brave enough to ask them out. And so I ask my companion to join me in a meal. The food itself usually plays a minor role at this stage. It's an important but not vital addition to the occasion. We wish to enjoy it, but certainly, it must not be a distraction from the mounting rapport.

The evening swings by. The free flow of information, opinion and ideas from one mind to another is expansive, exciting and liberating. We laugh, our eyes shine, we feel good about ourselves. We feel great about ourselves. We feel wonderful. We are the Kings and Queens of the Universe. And we agree to go out together again.

Next time, or sometime soon, one of us will cook dinner at home. The initial sexual tension may still be present, or it may not. Once again, the food must not be a distraction. Yet the evening cannot be allowed just to stand alone. All the words have been spicy and enticing, but the relationship must move on.

Spa City Oysters

A word before we start. Spa City Oysters are a little bit fiddly to produce, so it's worth making up a batch of 20 or so at the one time even though we only want a few to start the meal with. They do, however, make a pleasant snack anytime or as a treat to share with your mum.

Wash 20 small potatoes. Chats are good — small, light, clean, pure. Or, depending upon the partner, a Toolangai Delight may be more fitting to the mood. Steam the potatoes whole until just tender. Allow them to cool enough to handle. Let the spuds sit naturally on your bench. With a teaspoon, whip off the top of each potato and a scoop from the middle. Imagine a large boiled egg, on its side and missing its yolk, and you begin to get the picture. Stand the potato shells aside to cool. Meanwhile,

we're going to make skordalia, which is a type of potato mayonnaise I talked about once before in EG 92 ('Skordalia', page 83).

Using all the scooped potato from twenty small spuds, purée the best way you can. Don't be afraid of a light whipping; potato starch is strong enough to fly to the moon. You should know by now if your special

friend has an aversion to garlic. If not, mince two generous cloves with the potato until it binds together like a freshly joined pastry. Slowly trickle in a couple of tablespoons of olive oil. If the mix is still too tight (mayonnaise, remember), add a little water and/or a little more oil. Season with salt, pepper and fresh chopped parsley. You may, at this point, find it sexier to fold half-a-cup of good plain yoghurt into the mixture. Separately, mix a cup of breadcrumbs with a couple of good pinches of finely chopped rosemary.

Now, fill each scooped potato shell with the skordalia. Fill it well, fill it generously, but not to overflowing. Play it just that little bit cool. Put a knob of breadcrumbs on top of each spud, and pat them gently into the mayo. Tricky. With a light brush or an atomiser, wet the tops of each spud with some olive oil. Lightly, lightly. Put six on a baking tray and the rest into the fridge for tomorrow's still to come. Place the baking tray in a moderately hot oven, say 220° C, for about 20 minutes. That is enough time to offer, open and sip a nice glass of Spanish sherry. Allow the Spa City Oysters to cool slightly, and offer them directly into the fingers of your Significant Other. Meanwhile...



SOUTH COAST FIELD DAY

Sustainable Landuse, Sustainable Living

22nd & 23rd August

Landuse, Forestry, Community,
Building and Technology, Cottage Industry

Candelo, Bega Valley

Speakers: David Holmgren, Pat Coleby and more...

\$6 adult

Phone: (02) 6494 2014, (02) 6492 7306

Greenpatch Organic Seeds

*100% Organically Grown,
Non-Hybrid, Open Pollinated*



350 varieties listed.



All seeds
and plants
**100% Grown in
Australia.**

A wide range of Vegetables, Flowers,
Herbs, Natives and Exotics, Green
Manures, Sprouting and Bulk Seeds.
ALSO - Books, Calendars, Videos,
100 varieties of Bare-rooted, Food, Herb,
Aquatic and Permaculture plants.

For a comprehensive 1998-99 catalogue, send 4 X 45c stamps to:
Greenpatch Seeds, PO Box 1285, Taree, NSW, 2430.

Steam roasted eggplant

... on crisp polenta with herbed cream cheese. In EG 95 I gave the recipe for cooking polenta ('Remember polenta', page 37). Basically, it's one cup of polenta to one litre of water, cook like porridge over a low to medium heat for 15 minutes, and season. That recipe was for imported Italian cornmeal. I have since discovered two varieties of Australian-packaged cornmeal, both from Queensland, that require a third more water to cook properly. I guess it's only fair on a continent as dry as this one.

Anyway, this main course should not be a heavy meal, but beautiful, beautiful, beautiful. We're going to create a velvety, whole, steam roasted eggplant, sitting on a piece of crisp polenta, topped with a dripping mound of herbed cream cheese. Apart from the 'beautiful' angle, the object is to spend as little time as possible actually cooking once that Special Guest arrives. So, earlier in the day, using the recipe as shown, pour the polenta onto a metal tray to set. A depth of about one centimetre is nice. Leave in a cold place until it has cooled completely. Cut squares that are about 7 cm by 4 cm in shape. Or cut diamonds, love hearts, birds of prey, cricket bats, whatever. Take a risk.

You will need one essential piece of equipment — a griller. Your toaster may be okay, depending on the consistency of the set corn, but a griller is failsafe. Place the artistically represented cornbread under the griller, not too hot now; each side is going to take ten minutes to crisp up. Brush lightly with olive oil over the surface of each side as you turn it. Remember, the cornbread is already cooked, so there is no need to brown the slices. You are simply making a textural adjustment! When ready, remove from heat and reserve in a dry spot.

Take two small to medium eggplant. Wrap well individually in damp cabbage leaves, and place in your best casserole dish, the one with the really heavy lid. The eggplant will take about one hour to mush (they will still hold their shape however) in a moderately hot oven, so time your run well. Remember, we do not want to rush the meal, and we do not want to get anxious or upset by too much drink on an empty stomach. Perhaps place the dish

into the oven when the Spa City Oysters also go in. A reminder: warm the polenta in the oven for eight or ten minutes before serving.

To make the dripping mound of herbed cream cheese, combine 100 grams of cream cheese with a heaped tablespoon of finely chopped herbs of the day. I use rosemary, golden oregano, thyme and marjoram. Blend well with half-a-cup of water and a little salt. Add more water if required, and check seasoning. You are trying to achieve the gloopiness of yoghurt. Make more of this combo if you wish. It will keep well in the fridge for a couple of weeks.

To assemble: Place a smear of your best homemade tomato sauce or chutney across each plate. (White plates will look fantastic.) Place the artistically configured polenta squarely in the middle. Rest the whole, pressure-cooked eggplant on its polenta mattress. Discard the cabbage leaves. Look for depressions in the surface of the aubergine, and spoon a big dollop or dollops of cream cheese into these. As it begins to soften and drip, place a final nip of that tomato sauce over the top for colour, and a nice big piece of continental parsley. Alternatively, lightly scatter some chopped parsley over the whole dish. Be confident that each plate looks and tastes marvellous as you present it to the table of your Newly Hoped For.

A glass of a big, soft red wine will be a nice accompaniment. If you get a compliment on the dinner, smile humbly and don't make a fuss. Whatever you do, avoid talking in fine detail about the preparation of the meal. It could be quite boring. Certainly you may talk about common items of food interest, but remember, as the host, it is incumbent upon you to tease out the Other Person's conversation with gently tuned questions. Relax, enjoy, take your time. Have a piece of plain dressed lettuce. Take this opportunity to touch.

Okay, okay, okay. Let's settle down a bit here. The big production number is through, and the dessert is ready made. It should be small, optional and completely exquisite. It must be served whenever you are ready for it. It should go well with coffee. It should eat easily and informally away from the dining table. It is a version of a sweet Greek pastry which I call frontlava. (Sorry about that!)

Frontlava

The frontlava gets made the night before the Big Dinner. You will need a 9-inch (22.5 cm) baking pan, half-a-cup of melted butter, 350 grams of finely chopped nuts (walnuts and almonds are traditional), 100 grams of commercial halva, six juicy pieces of dried pear or peach, half-a-teaspoon of cinammon, a cup of fine semolina, and a packet of commercial filo pastry.

Preheat the oven to 180° C. Brush the inside of the baking tin with a little melted butter. In a food processor or blender, combine the nuts, halva, dried fruit and spice. Blend to a thick purée. Spread a sheet of filo onto your rolling board. Brush it generously with the melted butter. Scatter a pinch of the semolina over the sheet. Place a heaped teaspoon of the fruit-halva mix in the middle, two-

New! Crystal Waters Eco-village Video

- ◆ Eco-village concepts
- ◆ Design elements of Crystal Waters Permaculture Village
- ◆ Environmentally friendly houses
- ◆ General footage of the 259ha property
- ◆ 12 page booklet with more detailed information included
- ◆ Approx 14 minutes duration
- ◆ \$18.05 (includes post & packing in Australia)

Over 800 pages on eco-villages and related information now available on the Global Eco-village Network's web site:

<http://www.geia.org>

GLOBAL
ECO-VILLAGE
NETWORK

Lot 59 MS16, Crystal Waters Qld 4552
Fax: (07) 5494 4578
email: indegger@gen-oceania.org



thirds of the way along the pastry sheet. Roll the pastry up like a cigar, folding the sides in as you go. The shape should be a little like a short Havana or a mini spring roll. Brush over with some more butter, and place into the baking dish.

Repeat as above until all the mixture has been used. Pack the pieces tightly together in the dish, place in the preheated oven, and bake for about 20 minutes, moving the dish to the bottom shelf if the pastry is browning too quickly. While the frontlava is in the oven, make the syrup.

You will need two-thirds of a cup of honey and half-a-cup of sugar, the juice of one lemon, a cup of water, and a couple of whole cloves. Combine all in a saucepan over a medium to high heat, and stir to dissolve the sugar as it comes to the boil. Boil briskly for ten minutes. Strain, cool slightly and pour half of the syrup over the cooked frontlava. Leave it for half-an-hour to soak, then pour over the remaining syrup. Remember to leave overnight before separating.

This will make substantially more frontlava than you will possibly want to eat in one sitting with your Fresh

Face, but I reckon you may need a few pieces to share with an old friend the day after Your Dinner, and your companion may do the same.

By the way I am in no way endorsing a kiss-and-tell here. It just might be the beginning of something Really Important, and a nice leftover piece of frontlava can provide the impetus for a heartfelt expression or two.

This dessert is made for a cup of good coffee. I know it's after 4 pm, and I for one rarely drink coffee into the evening, but this is the kind of occasion for which it's worth making an exception. Sit side-by-side on a comfy couch. Place the pastries on a cut-glass platter on a coffee table, with a few pieces of fresh fruit and a knife for cutting pieces as required. Let the conversation move onto another level.

Don't be frightened. Sooner or later, the peach is always ripe to eat.

As you serve, allow your fingers to brush against those of your Intended. Smile knowingly during significant pauses. Be happy, you are where you want to be, and forget about the washing up after dinner. You may have better things to do.



Strawbale Design & Construction

We have a post & beam house in Daylesford under construction.

Please phone for an appointment to inspect
Ph: (03) 5348 1298

Imagine

Strawbale Constructions



Registered Architects and Builders

GRIMES & SONS

**MANUFACTURERS AND SUPPLIERS OF THE
HIGHEST QUALITY STAINS AND FINISHES
FOR TIMBER AND MUDBRICK**

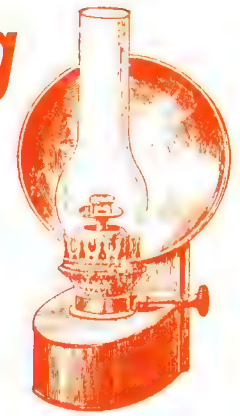
- Mudbrick Colourcoats and Clear Dust Proofers
- Silicone and Oil based Water Repellents
- Oil Varnish and Polyurethane
- Beeswax Polish, Shellac and Restoring Oil
- Woodstains and Timber Preservatives
- Stock and Specialised Colours

Telephone: (03) 9437 0733

Fax: (03) 9437 0822

1/1635 Main Road, Research, VIC 3095

Home Power Troubleshooting



If you have a niggling home power problem you haven't been able to solve, write to 'Home Power Troubleshooting', *Earth Garden*, RMB 427 Trentham, 3458, and we'll have an expert grapple with your problem free of charge. Peter Pedals, of the Rainbow Power Company in Nimbin, northern New South Wales, expands on a previous topic about wire size for solar panels.

Cable size is important

Dear Home Power Troubleshooter,

Will van der Haar of Ipswich, Queensland, had a question in EG 100's Home Power Troubleshooting column (pages 34 and 35) about 'Wire size for solar-electric panels'. Doesn't the answer partly depend on the current flowing or the number and size of solar panels?

Paul Johnson, Trentham, Victoria

Dear Paul,

You should not go by the current rating of the cable because your voltage drop would be excessive, and consequently you would be wasting a lot of your power in cable friction, making the system very inefficient. If you are going to spend thousands of dollars on solar panels, you should be prepared to spend a little extra and pay attention to correct cable size.

The maximum current rating of the cable should only be used as a guide to what size fuse to use to protect the cable and protect against electrical fires.

The maximum allowable voltage drop between the solar array and the battery bank is ten per cent. What the voltage is at the solar array depends of course on the intensity of the sunlight falling on the array, but more importantly on the voltage drop between the array and the battery.

Your allowable percentage loss of course depends on voltage (for example, ten per cent of 12 volts = 1.2 volts, and ten per cent of 24 volts = 2.4 volts). Actual measured voltage drop does not depend on the voltage of the system, but it is directly proportional to the length of cable (conductor) and the amount of current (amps) flowing. This means that the longer the cable length and/or the more current is flowing, the greater the voltage drop would be for a given size of cable.

On the other hand, voltage drop is inversely proportional to the cross-sectional area, that is, the size of the cable. This means that the larger the cable, the less the voltage drop for a given current and cable length.

This may sound like a long-winded answer, but the truth is that there is no direct answer without specifying all

the variables.

You would either have to tell me all the variables, or if you can make sense of the formula, you can work it out for yourself. So let's take out the guesswork and calculate what cable size we should be using. This formula is:

$$\text{Minimum cable size} = L \times I / V_d / 30$$

Where L = cable length in metres

I = current in amps (determined by the output of the solar array); and

V_d = permissible voltage drop (1.2 volts for a 12-volt system, and 2.4 volts for a 24-volt system).

So once I have calculated the answer to this formula, I would choose a cable size out of the available range that is *not* smaller than my calculation indicates. You can use the same formula to calculate cable size for your loads, except this time your maximum voltage drop is four per cent instead of ten per cent.

For those readers who are not inclined towards mathematics, I have calculated cable sizes and then taken them to the nearest larger size where the figure exceeded the previous size.

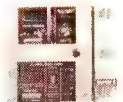
I have based these figures on standard sizes in automotive cable. All cable sizes are given in cross-sectional area (mm^2).

— Peter Pedals, Rainbow Power Company, 1 Alternative Way, Nimbin, NSW, 2480; phone: (02) 6689 1430.

SOUTHWEST SOLAR

**Sole Australian Importer of WHISPER
Wind Turbines (made in USA)**

Whisper turbines come complete
with a system controller/regulator
AS STANDARD



Contact: Malcolm Barko
RMB 2309, Portland, Vic. 3305
Ph: 03 5526 5329 Fx: 03 5526 5349
email: barko@iconnect.net.au
WWW: <http://www.earthlink.com.au/swsolar>

also selling & servicing Dunlite turbines throughout SE Australia

12-volt solar cable sizing

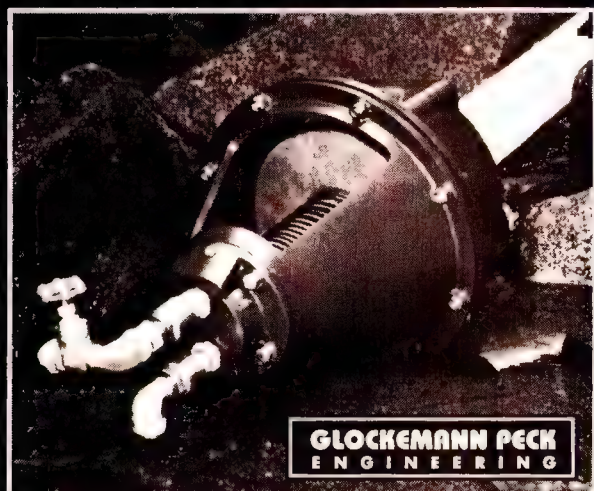
Distance Metres	Amps from solar array							
	2.5	5	7.5	10	15	20	25	30
5	2	2	2	2	3.2	3.2	5	5
10	2	2	3.2	3.2	5	7.5	7.5	15
15	2	3.2	3.2	5	7.5	15	15	15
20	2	3.2	5	7.5	15	15	15	21
25	2	5	7.5	7.5	15	15	21	21
30	3.2	5	7.5	15	15	21	21	26

24-volt solar cable sizing

Distance Metres	Amps from solar array							
	2.5	5	7.5	10	15	20	25	30
5	2	2	2	2	2	2	2	3.2
10	2	2	2	2	3.2	3.2	5	5
15	2	2	2	3.2	5	5	7.5	7.5
20	2	2	3.2	3.2	5	7.5	7.5	15
25	2	2	3.2	5	7.5	7.5	15	15
30	2	3.2	3.2	5	7.5	15	15	15

The Glockemann Water Pump

- Reliable water powered water pumping • Easy to operate
- no fuel costs • Pumps to a head of 200 metres • Versatile - install in any creek or river • Runs quietly - environmentally safe
- Minimal maintenance • Low supply drop, as little as half a metre



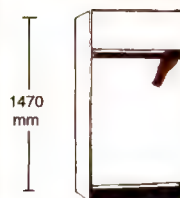
Please contact: **GLOCKEMANN PECK Engineering**
 Tele/Fax (02) 9708 0900 Mobile: 0411 863 693
 P.O. Box 357 West Ryde NSW 1685

LP GAS REFRIGERATORS

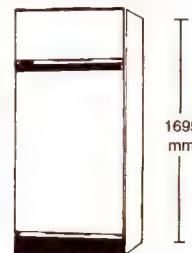
**MODERN, ECONOMICAL LP GAS
 FRIDGE FREEZERS DESIGNED FOR
 THE ALTERNATE ENERGY
 DOMESTIC APPLICATION**

Two models to choose from:

**217 LITRE
 MODEL QD22F**
 187 litre refrigerator
 30 litre freezer



**320 LITRE
 MODEL QD320G**
 246 litre refrigerator
 74 litre freezer



**For further information
 contact:**

VIC/TAS
 DP Refrigeration
 Tel: (03) 9437 0737
QLD
 Gas and Portable
 Refrigeration
 Tel: (07)5593 4066

NSW
 Country Gas Fridges
 Tel: (02) 9681 4365
SA
 Clifton Caravan Ref.
 Services
 (08) 8349 4505

SOLAR NOT NUCLEAR FOR KAKADU

“Mirrar people have fought to protect country and people from uranium mining for many years. Now, Mirrar are defending their country against the proposed Jabiluka mine. We invite you to come to our country and join our struggle to uphold the cultural and environmental values of Kakadu.”

— Mirrar Clan, March 1998.

by Alan T Gray
Trentham, Victoria.

THE invitation above, issued by the Mirrar people of Kakadu and published in the previous issue of *Earth Garden*, was something Judith and I could not ignore. My main motivation for compiling *The Earth Garden Book of Alternative Energy* in 1996 was to show practical, here-and-now alternatives as arguments against Australia's involvement in the nuclear industry and uranium mining. This surprises some people — my interest in energy independence is secondary to my long-standing interest in sparing Aboriginal land from uranium mining.

In March this year we travelled to the Jabiluka Blockade to help our Darwin friends, Jayne Weepers (Coordinator of the Environment Centre NT), and James Warden (Wilderness Society campaigner). We ended up spending eight days working for the blockade at the tail end of the Wet Season (read: difficult conditions! The Dry Season, from April to October, is far more pleasant, with average daytime temperatures of 28° C, low humidity, and nighttime temperatures averaging around 16° C).

Many people know that uranium mining is unnecessary and destructive, but more Australians need to know just how wrong it is for the uranium mining company in Kakadu to ride roughshod over the rights of Aboriginal land owners. The Jabiluka uranium mine lease is on land owned by the Mirrar people. They have title to their land but cannot stop the mine without support from other Australians.

Blockade base camp

When we arrived at the blockade base camp, we were surprised to find a lush green camping area with scattered shade trees, excellent pit toilets, and a huge water tank storing superb-quality bore water. The blockade base camp is on Mirrar land, 5 km along the Oenpelli Road, just north of the mining town of Jabiru, which was built to service the existing Ranger uranium mine.

A camp kitchen, providing three meals a day for a modest fee, a communal space, women's space, and shower area completed a very civilised set-up, thanks to many long months of preparation by Darwin members of the Jabiluka Alliance — a coalition of Australia's environment groups who've been working on the campaign for



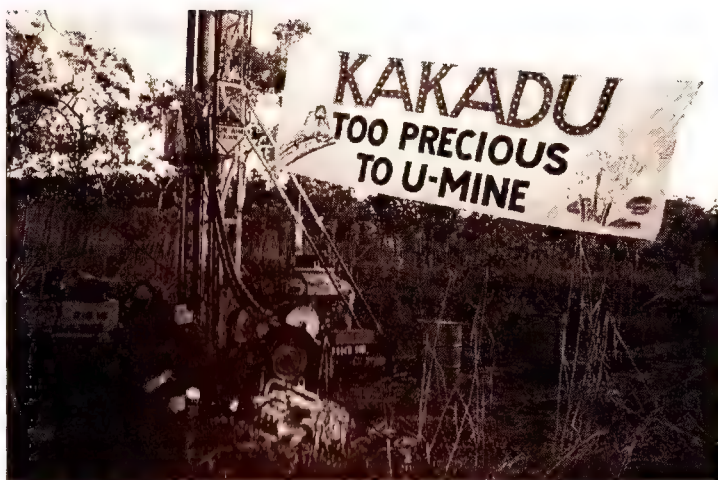
Jacqui Katona
(kneeling), Executive
Officer of the
Gunjehmni
Aboriginal
Corporation,
addresses the
blockade base camp
of 70 people during
a one-hour
induction, during
which she explained
many aspects of
Mirrar culture, no-
go zones, and other
vital information for
blockaders wanting
to support the
Mirrar cause.
Photograph by Sam
McQuillen.

two years. On 23 March, after months of preparation, the Jabiluka Blockade began, with a colourful and peaceful march to the gates of the existing Ranger mine. Earlier that morning a small group of us had walked in the dark into the Jabiluka lease, after seeking the permission of the Mirrar people.

The uranium ore body is one hour's walk into the lease area from the Oenpelli Road, along a track bulldozed by mining companies — bulldozed through sensitive sites against the wishes of the owners.

On top of the ore body site, we found drilling equipment and a drilling rig, working seven days a week to drill the portal — the entrance to the underground mine.

This is in stunning country, on a low ridge with creeks either side, and superb views out over the Jabiluka valley to the escarpment in the distance. Jabiluka should always have been part of Kakadu National Park. The Jabiluka 'lease' contains a diverse range of sacred sites, living areas, spectacular wetlands, and floodplain country, and is completely surrounded by the national park.



Our banner — painted by the indefatigable Benny Zable of Nimbin — hangs from the drilling rig on the Jabiluka uranium ore body on Mirrar land, while two (hot!) blockaders halt work for half a day. Photograph by Sam McQuillen.

Two of us hung a colourful banner from the rig and then chained ourselves to the equipment to prevent work. We were lucky enough to:

Energy future is Green, not radioactive

THE commercial use of solar and wind power is happening so quickly in Europe, the USA and Asia, that proponents of nuclear energy look like antiquated cheersquads for a 1950s power source that's never been popular.

On the other hand, wind power and solar energy are easy to like. What could be more sensible than harnessing the wind that rustles through the tree-tops, or the sunlight that beats on our roofs? According to the Australian Bureau of Statistics, 39,000 times Australia's daily energy requirements hit the continent in the form of solar energy each day. And 45 times our daily energy requirements hit our coastlines as wind power. Australia's solar research scientists hold the world record for the most efficient solar-electric cells, and Australia is already the world's largest consumer of solar-electric power because Telstra has more than 4.5 million watts of solar cells in use in the Outback.

So the Solar Age and the wind power revolutions are upon us — we just need to wheel our politicians into the sunlight to show them what's going on out there in the Big Wide World. Denmark, with lower wind speeds than Australia, will generate ten per cent of

its power from the wind within ten years. Spain will power 30 per cent of the entire country from wind farms by 2010, and Holland is installing 10,000 megawatts of wind power — that's more electricity from the wind than most nuclear power plants can manage.

Sweden's renewable energy market is progressing thanks to a 25-year-old referendum decision to reject nuclear power, and Danish wind turbines have dropped in price by 20 per cent in the past three years. This 'Green' industry employs 16,000 people in Denmark. In Sydney last year, BP Solar won a \$40 million contract to supply solar power to one million villagers in The Philippines, creating 40 jobs in Sydney in the process. An entire Japanese housing estate will soon have roof tiles made of Canon solar panels.

The 'allure of nuclear power' is that small quantities of fuel can produce large quantities of energy: the big bang for your buck. One gram of uranium can produce 3,800 kilowatthours of electricity. However, a uranium atom can only be fissioned once, whereas a silicon solar cell can absorb photons of sunlight repeatedly and convert them to electricity.

Over its lifetime in solar-electric cells which are only 15 per cent efficient, one gram of silicon produces 3,300

kilowatthours of electricity. So, gram for gram, silicon and uranium produce comparable amounts of electricity, and silicon is the most abundant element on the Earth's surface.

Wind and solar energy power the homes of thousands of Australians. A new solar power farm has just opened at Singleton in New South Wales; another one is being built near Canberra, and other solar power farms will be feeding Green electricity into the mains grid before the end of 1998. Consumers love these Green power schemes — 230 New South Wales households per week are signing up to schemes that deliver them solar or wind-generated electricity for a ten to 20 per cent premium on their power bills.

Australia also has huge potential to use solar water heaters. Only five per cent of Australian homes use them, whereas 50 per cent of Danes have them, and we average far more sunshine hours per year than Denmark. With our technical, natural and intellectual resources, there is no justification for expanding uranium mining into the Jabiluka heartland of Kakadu — or anywhere else. The answer, my friend, is not blowin in the Chernobyl wind. And the best nuclear reactions happen 150 million kilometres away — on the sun.



The camp kitchen at the blockade serves up delicious meals three times a day to sustain a happy camp atmosphere. Photograph by Andrew Gough.

- we were not trespassing
- we were on Mirrar land at the invitation of the legal owners, and
- we were there to help protect their property from destruction.

It's not an easy decision to make — to break the law. It's harder to do that than it is to be chained to a drilling rig while waiting for a team of mine workers and police to approach, but for me, the worst part of being arrested was having to remove my wedding ring to be finger-printed! I haven't removed it since I was married to Judith in 1992, but my fellow arrestee, Alec Marr, told me in no uncertain terms in the Jabiru lock-up to stop making a fuss about it.

The Lightning Man solution

Our five-year-old son, Harry, is a big fan of Namarrkon, the Lightning Man spirit of western Arnhem land. Harry saw a beautiful rock painting of Namarrkon at Nourlangie Rock in Kakadu two years ago, and he clearly remembers him. Namarrkon has stone axes tied to his elbows and knees, and he uses these to make thunder and lightning throughout Arnhem Land. On 5 April Harry

drove with me down to Melbourne to speak at a public rally against Jabiluka. This was part of a national day of action that saw thousands of people marching in a dozen cities throughout Australia. On the way to Melbourne Harry suggested that Namarrkon get to work on the mining company's bulldozers, but perhaps it's now time for ordinary Australians to act where our politicians have failed us.

Harry came home from the Jabiluka Blockade even more enamoured of traditional Aboriginal culture. His first job on arriving back from Darwin was to grind up a soft, clayey rock to make some yellow 'ochre', and then to paint a python and her eggs to send to one of his new-found heroes: the breathtak-

ingly-powerful Jacqui Katona, Executive Officer of the Gunjehmni Aboriginal Corporation, leading the struggle by the Mirrar people against the mine.

Stopping the mine

The Mirrar unanimously oppose the Jabiluka mine, and are inviting Australians to join them at the blockade. The Federal Government's Social Impact Study, published last year, showed that there have been no lasting benefits to Aboriginal people from the adjoining Ranger uranium mine — even though it has operated for 20 years.

Mr Howard needs to understand that the 210-year tradition of ignoring Aboriginal people's wishes about their land has to end. If he were trampling on the property rights of another racial group — say Greeks or Jews — his National Party mates could not succeed. Isn't it about time we stopped expecting Aboriginal people to keep enduring our chase for dollars?

It's not just the Coalition that's a worry. Although the ALP has made weak noises about stopping Jabiluka, Senator Bob Brown exposed their lack of resolve in the

STANLEY

A LEGEND IN COOKING!

WOOD STOVES with

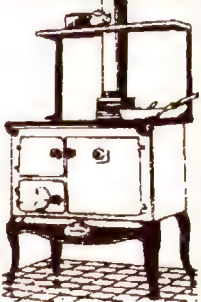
Cast Iron durability

- Large fire box with choice of Domestic Hot water or Central Heating boiler
- Large self cleaning cast iron oven
- Large cooking surface with ground hot plates
- Choice of models and finishes

FOR YOUR CLOSEST DEALER CONTACT:

CASTWORKS

8 Roosevelt St, Nth Coburg 3058
Ph (03) 9354 4666 Fax (03) 9354 9971



G.J.B. WINDROTORS PRESENTS

"Little Windmill"

THE CHEAPER ALTERNATIVE

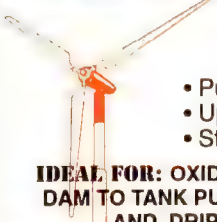
- Pumps up to 30ft in light winds
- Up to 500 gallons in 24 hours
- Stands just 14' high, blade span 6'

IDEAL FOR: OXIDISING PONDS, HOBBY FARMERS, DAM TO TANK PUMPING, RESIDENTIAL GARDENS AND DRIP FEEDING FOR GARDENS.

See the working display at: Dan-Kim Sheet Metal, Ballarat Rd., St. Arnaud
Enquiries: Gerrie and Joyce Bussem at G.J.B. Windrotors

PO Box 145, St. Arnaud 3478
or Brian Waghorn on 03 5495 3103

Phone 03 5499 9270
Mobile 0417 596673



Senate on 7 April this year. Senator Brown put up a two-part motion, that the Senate: "Notes the large rallies around Australia last weekend in support of the Mirrar people and against the mining of uranium at Jabiluka. And calls on this and future Australian governments to ban any export of uranium from the Jabiluka mine."

Guess what: the ALP and the Government combined to defeat the motion.

Jabiluka rock

On 20 April three of Australia's leading rock bands, *Midnight Oil*, *Regurgitator*, and *Coloured Stone* played a dawn concert in Kakadu to support the Jabiluka campaign. The sun rose over more than 200 blockaders as Peter Garrett declared the Jabiluka mine proposal "an obscenity", while the traditional owner of Jabiluka, Yvonne Margarula, restated her people's objections: "I still say no". The event was widely broadcast on national media, and featured indepth on ABC TV's *The 7:30 Report*.

By late May more than 750 people have stayed at the blockade and the average number of blockaders in the base camp at any one time is more than 70 people. Each week busloads of people have been arriving on ultra-cheap express bus rides from Sydney and Melbourne (for instance, Melbourne people can get on the 48 hour express, which arrives on time, for \$280 return — the cheapest way anyone from Victoria will ever see Kakadu).

On 12 May in the Jabiru Court, Jayne Weepers, and five other including myself, pleaded not guilty to our charges of trespass. Our charges will be heard in the Darwin



Peter Garrett, lead singer of *Midnight Oil*, sings for Kakadu with the Jabiluka escarpment in the background. Photograph by Andrew Gough.

Magistrate's Court on 14 and 15 September, and we intend to contest them as vigorously as possible.

Mirrar people want us to make the effort to travel to their land, to be welcomed and inducted, and to show them with our presence that we will do something to make all the fine words about 'respect for Aboriginal people' into a reality. Long after the last uranium-mining dollar has been spent, the Mirrar people will have to deal with the legacy.

- **The Jabiluka Blockade will be maintained right through the Dry Season until December 1998. To join the blockade, and have a holiday in Kakadu National Park while you're at it, or to offer materials, donations or other support, contact environment groups in your State capital, or the Environment Centre NT at 24 Cavanagh Street, Darwin, NT, 0800; phone (08) 8981 1984; fax (08) 8941 0387.**



A colourful street theatre performance outside the gates of the existing (Ranger) uranium mine in Kakadu. Photograph by Andrew Gough.

2000 people marched for Mirrar in Melbourne on 5 April. Alan and Harry Gray address the crowd at Flinders St Station. Photo by Tony Fuery.



Earth People Write continued from page 7

Could demos be counterproductive?

Dear Earth Garden,

Could the protesting of us Greenies have ultimately led to the burning of the forests in Indonesia? Could demonstrations sometimes be counterproductive? Perhaps we had more influence than we expected, and eventually the majority of Australians stopped buying topical timbers. Hence, unable to find a market for the wood, the Indonesians burnt their forests to do something more profitable with the land. If this were found to be the case, or a contributing factor to this disaster, what can we learn from it?

M A Flegg, Castlemaine, Victoria.

People for a food co-op

Hi,

We've moved. We are now living on the Bellarine Peninsula near Geelong in Victoria. We only have a house block at the moment, but we are surrounded by lots of trees, birds and fresh air — a fantastic new experience after living in the city always. We had to leave our wonderful city veggie garden, but we have the challenge ahead to establish a permaculture garden at our new home, on very sandy soil.

I'd love to connect with any other Earth Gardeners in the region to gain some local information. I am having organic fruit and vegies sent down from a terrific organic grocer at the South Melbourne market. I am considering setting up a co-op down here if I can find some like-minded people who want to eat food without chemicals. We have been inspired by your magazine after discovering it at the Burnley Field Day. Thank you for putting your time and energy into such a wonderful and important publication.

Melinda Clarke, 11 Fairview Street,
St Leonards, Vic, 3223.

One giant leap for a babyboomer-kind

Dear Alan, the crew and all EGers,

A happy 1998 to all! Congratulations for a top magazine. I've been buying and devouring EG for over eight years and now consider EGers as extended family. I'm about to take my giant leap from suburbia to acreage and an EG lifestyle, and will be looking at land in a 50 km radius of Lismore,

New South Wales. I'm into permaculture and organics, and will look at strawbale, cob, mudbricks and any other environmentally sound form of building. I'm a young babyboomer, not into sects or rigid beliefs, and would love to hear from anyone in that area, or wherever, with tips, advice and contacts. I will happily reply to everyone, and look forward to meeting some of you during my search for 'my patch'.

Inger Huber, 3 Barow Ct, Ashmore, Qld, 4214.

Green marketing

Dear Earth Garden readers,

With each edition of *Earth Garden* my conviction to pursue a new career strengthens. I am interested in combining my desire to improve our world with the skills I already have. I would love to market Earth-safe products, organic cloth or anything which will replace some harmful product. Can you help with ideas, inspiration or a product?

Rob Piller, 82 Onslow Road, Shenton Park, WA, 6008; ph: (08) 9381 9637.

A few problems, and lost friends

Dear EG,

Thank you for such an informative magazine. I thoroughly enjoy it, usually reading from cover to cover and constantly referring back. We're new to this lifestyle, having moved to our 40-acre piece of heaven only four months ago. Our two-year-old loves it and is always 'helping' me in the veggie patch.

I am hoping someone can help with a few teething problems we're having. Our gas fridge does not seem to keep food cold properly. The flues are clean and I try to keep from opening the door as best I can, but the fridge never seems to get sufficiently cold. Next I'm having a major problem with grasshoppers of all shapes, sizes and colours. How can I protect my vegies effectively?

Does anyone know how to keep cane toads at bay? I can't stand them. Our bathroom is outside the shed we live in, so at night there always seems to be one hanging around. Lastly I'm hoping someone can help find two dear friends of mine. Judy Finn left Brisbane in early 1997, and I last heard she was in Cobram, Victoria. Bev McComber moved to Perth in late 1996 with her two small sons. I had an address in Tuart Hill but have lost it. If they are reading this, or if someone knows them, please pass on my address because I would

love to hear from them and know they are all okay.

Thank you in advance in case my writing gets behind. Keep up the great work. I hope to read EG for the next 25 years.

Tracie Matthews, PO Box 923, Kingaroy, Qld, 4610.

Fish queries

Dear Earth Garden,

Does anyone have any information on breeding marron for farm dams? We need to know if aerating the dam with a windmill would work, and if there would be any competition with the resident coonaks. Also, is there anyone farming silver perch in dams?

Robyn Curtin, PO Box 113, Ongerup, WA, 6336.

The call of the country

Dear Earth Garden,

In EG 102, I read the story by Bruce Hedge ('When we nearly lost the dream', page 62) with great interest. I settled on my acreage property 11 years ago with my two young daughters. For the first few years they thoroughly enjoyed the country lifestyle, with chooks to feed, a cow to milk, donkeys to ride and so on. We struggled financially, but living in this beautiful place seemed to compensate.

However when the girls became teenagers, the desire for material things became quite strong. They complained about the lack of a VCR, an automatic washing machine, and other appliances that they thought they were missing out on. They complained about being isolated from the 'good times', such as discos, movie theatres and the like. They left home when they were 18 and 16 respectively to sample 'the good life'. They are now 21 and 19 years old, and this is what they now say about a simple country life.

"When we lived at home, we took country living for granted. We got sick of feeding the chooks, and baby chickens and ducklings stopped being a novelty. We enjoyed riding our donkeys, but eventually even this became boring. Newborn calves — lovely, but once you've seen one, you've seen them all. For the past few years we have lived in suburbia, with all the modern conveniences. We enjoyed it at first. But now our hearts long for the country life again. We feel a strong need to visit Mum and the farm on a regular basis, and we love tending the animals and enjoy picking the fresh fruit and vegetables.

"We really miss having a compost

bucket, and always feel uncomfortable putting food scraps in the bin. Both Alana and I want to settle in the country, and have a similar lifestyle to what we had when we were kids. I guess the saying 'You can take the kid out of the country, but you can't take the country out of the kid' is very true."

Liz, Olivia and Alana Sinnamon, Kenilworth, Qld.

Suspended clay

Dear Alan,

Thanks for sending the catalogue on the book club. Because of my illness we have moved, and this means we can now try out some of the many ideas we have gleaned from the mag over the years. I mentioned to the people at the expo that we had problems with very high levels of suspended clay in our dam water which we use for irrigation. It is so bad that it suffocates the plants, though it is not of a thick consistency. We have left some standing for two to three months, and there is still a great deal of suspended clay and hardly any deposit. There must be other people in the same situation, and maybe they have a solution. We've been told that using alum was okay, but we'd like to know if there are any other solutions around. Perhaps it is an idea for a story. Thanks for the mag and keep up the good work.

Fr Paul Walliker, 'Tangarra', RMB 3161, Northwood Rd, Seymour, Vic, 3660.

An answer to illness?

Dear editor,

I feel that many people do not know of the relationship of our soil and grass to our food supply or of the effect on their health. Our soils and pastures are often deficient in minerals. As a veterinary surgeon I have been treating farm animals with mineral deficiencies for 40 years. Examples include calcium, phosphorus, selenium, copper, cobalt, magnesium, boron, and so on. It is generally accepted that land that has been farmed for more than 20 years is usually deficient in selenium.

We treat our animals, but nobody treats humans! The vast majority of doctors are not interested, have had no training in nutrition, and are guided by the drug firms with their superficial quick-fix cures. Due to ill-health I studied human nutrition. I found our food supply lacking in vitamins and minerals, and has more than 4,000 chemicals. This caused a tenfold increase over the last 30 to 40 years in chronic disease and cancer, parallel to the increase in chemicals.

It is obvious from the research that we need a vitamin and mineral supplement to cover every possibility. After much searching, I found a broad spectrum supplement that was not only scientifically balanced synergistically, but was the only one of its kind registered by the government on the therapeutic index. It also actually worked and was used by several doctors.

Due to the Therapeutic Goods Act, one cannot claim its ability to cure any disease and print the name. For further details contact me on (03) 5520 2250, e-mail (couthie@iconnect.net.au).

Peter M Couthie, RMB 2269, Portland, Vic, 3305.

Oz, here we come!

Dear Earth Garden people,

Our subscription is due for renewal. Because we are shortly leaving Switzerland we don't want to renew our subscription.

We are travelling by train from Switzerland to Beijing, China, and from there flying to Brisbane. We are going to live in the eco-village Kookaburra Park in Gin Gin, Queensland. We really like your magazine, and there is always lots of good information for us.

I'm sure we will subscribe again once we are in Australia and establishing our permaculture garden at Kookaburra Park. **Taja and Christoph Steinbeck, Bollackerweg 24, CH-5024, Küttigen, Switzerland.**

Possum-proofing

Dear Alan and Judith,

I am writing for advice on possum-proofing the garden. Don't tell me about chilli spray — they've eaten all the chillies off the bushes. I've also been told quassia bark doesn't work round here. I wondered if I alternated rue and wormwood every few feet around the outside of the fence. Would it affect the garden, which is two feet inside the fence? I have a few plants, and they grow fairly easily from cuttings. Do you have any other suggestions? Can I do anything with rhubarb plants as pest repellents?

Felicity Cahill, c/- Post Office, Drake, NSW, 2469.

Everything okay?

Dear Alan, Judith and sons, and Earth Garden,

Just to let you all know your subscribers do care and trust that the loss of houses and burnt pastures in the recent Trentham

fires did not involve any of you in personal misery. Would value a brief word from you re your welfare. I believe whatever the situation your mail could be very demanding so I have enclosed a SSA envelope to ease the path a bit! Our prayers are for you and your neighbours

Peter Loftus, Medindie, SA.

Dear Peter,

On page 3 we discuss this. — Alan.

Looking for community living

Dear Earth Garden,

I'm looking for 'heaven', so to speak. I'm interested in community living similar to Crystal Waters. I would appreciate any information about communities which are into permaculture, working together, and teaching the broader community, and teaching alternative therapies and craft. Preferably this community would have its own housing, including rentals available, in Victoria, New South Wales or Queensland. Thanks,

Kaye Volkmer, 12 Fig St, Dromana, Vic, 3936.

Winter treat: EPW continues on p 87!

I WANT TO INVEST WITH CONFIDENCE

AUSTRALIAN

ethical TRUSTS

Agribusiness or reforestation.

Mining or recycling.

Exploitation or sustainability.

Greenhouse gases or solar energy.

Armaments or community enterprise.

Investors can choose

Through the AE Trusts you can invest your savings and superannuation in over 70 different enterprises, each expertly selected for its unique combination of earnings, environmental sustainability and social responsibility, and earn a competitive financial return. For full details make a free call to

1800 021 227

Investments in the Australian Ethical Trusts can only be made through the current prospectus registered with the Australian Securities Commission and available from-

AUSTRALIAN ETHICAL INVESTMENT LTD
Canberra Business Centre Bradfield St. Downer ACT 2602

EARTH GARDEN REVIEWS

Edited by Judith Gray



**Community Aid Abroad
Vegetarian Cookbook
\$12.95, A4 format,
spiral bound
Available from**

**Community Aid Abroad
PO Box 184, Kilkenny, SA,
5009.**

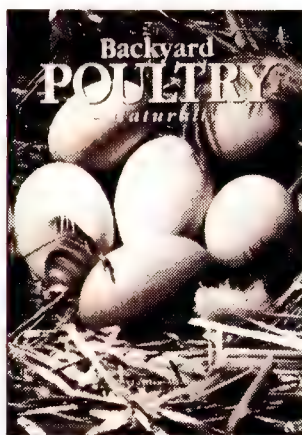
This little gem is ideal for the beginner at vegetarian cookery. Dishes from all over the world are presented in a very plain and concise style. If you have ever wanted to go to remote places in Africa, India, South America or Nepal, do it in your own kitchen.

The best thing about this book is the ingredients used are simple and more than likely in your fridge now. Try the leek and lentil lasagne from Argentina, or perhaps a potato and pea curry from India.

This is the perfect book to give a student or young person just leaving home, and is an

ideal way to broaden your family's palate while helping others around the world. The book includes a good section on the politics of food. Living simply is a very personal way of helping world environmental problems.

Meat is a very expensive form of food, and this book is designed to offer some delicious alternatives. With 160 pages of recipes, you can't go wrong.



**Backyard Poultry —
Naturally
by Alanna Moore
\$26.95, Bolwarrah Press,
Available from 'The Good
Life' Book Club or see
page 88 to order.**

Backyard Poultry — Naturally is the best all-round poultry book I have seen in ages. If you are truly committed to organic prin-

ciples, if you love keeping poultry, or if you want to learn more about rare breeds in Australia, this book is for you.

This book is broken up into the essential chapters, covering housing, feeding, breeding and health of poultry. Alanna doesn't forget the duck lover or the permaculturist. Using diagrams and photos, Alanna shows you how to incorporate chooks into your permaculture plan.

The idea of a sick chook being a dead chook 'flies out the window' with this book. Alanna makes it easy to diagnose and treat common poultry diseases. Proper maintenance and feeding of your chooks makes a healthy flock. To achieve maximum health, Alanna says you must feed only natural food stuffs in preference to commercial pellets. This book is about the best herbs to *serve* your chook, rather than the best herbs to *serve with* your chook.

Try garlic, onion and mustard green for colds. Combat worms with horseradish leaves, wormwood tips or tansy flowers. Whether you are in the city or the bush, *Backyard Poultry — Naturally* is an excellent starter's manual.

It is truly practical, and makes it easy to see how the organic way is the ideal way with chooks.

The Ornamental Vegetable Garden



The Ornamental Vegetable Garden
by Diana Anthony
Photos by Gil Hanly
\$35, hard back, 120
pages, colour.
UNSW Press,
(02) 9398 3608.

This is a landscape design book, both beautiful and practical. The edible garden is as much a creation as any other garden you may design. Diana shows that architectural forms and interweaving colour and texture can be very much part of vegie gardening.

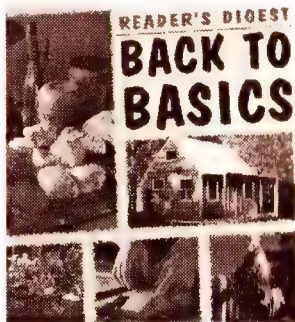
So what is a potage garden? Diana says "The pathway to the front door (in a potager) is a delicious assault on the senses." The potager is where aesthetics and practicality are combined to produce a garden for the gourmet as well as the creative plants person. This book puts an end to the vegie garden being a dull island set apart from the rest of the garden. It can stand on its own as a beautiful environment.

At first glance you would expect this book to be an English publication. Beautifully photographed and loaded with detailed diagrams, it looks a true collector's piece. Not so!

This is very much a southern hemisphere gem. Diana Anthony lives and gardens in New Zealand, and is an experienced writer. This book is very expressive and sincere.

The Ornamental Vegetable

Garden covers all aspects of designing and planting the potager. Laying brick pathways, building compost bins, erecting espalier frames — it's all here. I especially loved the plans for traditional ground layouts. Diana hasn't forgotten the small garden or 'no soil' gardening. Tiny courtyards can be highly productive using containers and frames. Topics such as crop rotation, combining herbs and flowers, and companion planting, are all discussed to create a very informative and inspiring book.



Back to Basics
A practical guide to old-fashioned self-sufficiency
Reader's Digest
\$57, hard cover,
large format, 464 pages.
Available from 'The Good Life' Book Club or see
page 88 to order

This book is truly special. It is a complete lifestyle book and practical in the true *Earth Garden* way. The beauty of this book lies with its fabulous colour drawings and photographs. Each idea and project is clearly laid out, and is a joy to study whether you intend doing it or not! I particularly enjoyed the diagrams that accompanied the chapter on stone masonry.

If you loved the *Australian Self Sufficiency Handbook* you can't go past *Back to Basics*. This book is divided into six parts: land and house; energy; food and livestock; enjoying your harvest; skills and crafts; and fi-

nally, recreation. It is important to note that this is the Australian and New Zealand edition, so it is truly relevant and 100 per cent practical.

Back to Basics is about recapturing the common sense of less complicated times, and with it, discovering the special sense of accomplishment. It is suitable for the bush or city dweller. If you want to learn how to season timber or make jam, it is all here. In fact it's got everything granny and grandpa forgot to tell you.

The chapter on recreation is an interesting addition to this up-to-date DIY book. The philosophy behind this addition is to help people rediscover old fashioned 'non-electronic' pastimes. This book is a must. It is beautifully designed, and wastes no space on trivia. *Even the most seasoned and skilled *Earth Gardener* will learn something new.

BE READY FOR WINTER

Keep Warm and SAVE!



Our attractive, inexpensive, slow combustion **HOT DRUM** wood heaters will keep you warm and look great in owner-built homes.

For information on kits, ready-mades, water heating, fireplace conversions and other models in the range.....

Ring or send a 45¢ stamp to:

HOT DRUM	FLAT TOP HEATING
Box 308, Maleny	Box 272, Eaglehawk
Qld. 4552	Vic. 3556
(07) 5494 2496	(03) 5446 2090



NHN is a new regular feature in *Earth Garden*. These days it's hard to keep abreast of developments, ideas and theories in natural health. We'll bring you reports of new research, old ideas which have resurfaced, and tips for leading a healthier lifestyle without depending heavily on large drug companies.

Freedom Good For Your Heart?

Dietary changes since the fall of communism in Poland have led to a sharp decline in deaths from heart disease. After a steady rise from the 1960s, deaths from heart attacks fell by 25 per cent between 1991 and 1994, and 10 per cent fewer people died of strokes. Withdrawal of large consumer subsidies, especially for animal products, has forced Poles to eat more vegetables and fish. Abolition of import controls also improved year-round supply of fresh fruit.

Vitamin E's Surprising Help

Researchers at the University of Bologna report that vitamin E is effective in treating chronic hepatitis B. Twelve of 24 patients diagnosed with chronic hepatitis B were assigned to receive 300 mg of vitamin E twice a day for three months while the other 12 received no treatment. After nine months, seven of the twelve vitamin E patients (58 per cent) had normal liver readings, while none of the patients in the control group had recovered at the end of the nine-month follow-up period.

Doctors seek spicy remedy to joint pain

Chilli peppers may reduce the inflammation and pain of arthritis.

Experimental studies at St Bartholomew Medical Centre in London have found that capsaicin, the substance that makes chillies hot, inhibits the nerves that produce inflammation.

Dr Bruce Kidd, a reader in rheumatology, told an international medical conference at the Gold Coast recently that the research was in line with a recent discovery that nerves had a receptor specific to capsaicin.

The bone and joint research unit of St Bartholomew and London Hospital School of Medicine has been studying the role of the nervous system in the development of joint pain.

It found that patients who had inflammation in one knee or wrist would tend to develop it in the matching joint. "It's clear that the nervous system can produce chemicals which produce inflammation and we reasoned that if we suppressed that we may be able to suppress arthritis," Dr Kidd said. "We used capsaicin, which selectively inhibits those nerves which produce inflammation."

Several US studies had shown that rubbing capsaicin on to joints alleviated pain, but its application to inflammation was new.

Theoretically, eating chillies might be effective but this had not been studies, he said.

— AAP

Solar/Dynamo Radio Flashlight



FOUR WAY POWER SYSTEM

- 1 Solar Power
- 2 DC Back-Up
- 3 Dynamo-Electric Power
- 4. Normal type "AA" Batteries

Built in Rechargeable Batteries
Totally self powered Am Fm
Radio-Flashlight-Emergency Flash
Military Standard Components
Price: \$38.00 + P&H \$5.00
Enquires & bulk pricing Phone Dany 61+02+66556604
E-mail dany@coffs.com.au or dany@key.net.au

Dynamo Flashlight

**Environmentally Safe
Ecologically Clean Ultimate**

In battery Free Technology
Flashlight can work **under water!**
non-corrosive **The best** dynamo
flashlight in the world today!

\$19.50 + P&H \$4.50 Send Cheque,
postal order to:
D.A. Van Zanten,
P.O. Box 170,
Urunga, 2455 NSW
IMPORTER

Solar Powered
Mosquito Repeller
No Chemicals!
Uses sound drives
mosquito's Away!
5 Mtr Radius
Works overnight
Charges in 3Hrs
Price \$14.00
+\$3.00 P&H



Solar Power...?

- ✓ Clean. Independent. Reliable. The smart choice.
- ✓ Solar hot water - Cut global warming and save \$\$
 - ✓ Solar pumping
 - ✓ Wood stoves & heaters
 - ✓ Generating Sets
 - ✓ Gas & DC Fridges



**Expert advice, and
the best service &
support you'll find**

Full SEIA Accreditation

RMB 1773 BENALLA 3673
email: sunreal@nec.net.au

.... SUN REAL!

Call us for a site visit:
Tel/Fax 03 5768 2248
Mobile 014 408 531

Renewable Energy * Solar * Micro-Hydro * Wind in the North East

EARTH GARDEN UNCLASSIFIEDS

Unclassifieds are 50 cents per word prepaid.
The deadline for the September issue is 1 August.



HOME STONE FLOUR MILLS. Mill your own stoneground wholemeal flour for cakes and bread at home with a Retsel Little Ark Stone Flour Mill. Endorsed by the Housewives' Association. Write for catalogue to: Retsel Distributors, PO Box 712, Dandenong, Victoria, 3175, enclosing three postage stamps, or telephone (03) 9795 2725. Distributor enquiries welcome.

HOME PLANS. 90 plans for handcrafted homes and workshops/studios of poured earth, strawbale, mudbrick, rammed earth, stone, pole frame and timber construction. Mail \$62 (postage included) for "The Earth Builders Plan Catalogue" to John Barton, Building Designer, 31 Sharp Street, Newtown, Geelong, Victoria, 3220, or phone (03) 5222 5774 for fixed quote to draw/document your home plan. Cheques, Mastercard, Bankcard, Visa accepted. Free brochure available.

FREE \$4.50 PACKET OF MIXED GOURD SEEDS when you purchase our new 52-page gourd growers handbook for \$18. Mixed pkts, Ornamentals, Hardshells, Luffa Sponge, Canon Ball, Calabash, Bean, Bottle, Birdhouse, Goose, Maranka, coloured corn all \$4.50 pkt, minimum purchase \$9. Bulk pkt \$10 - 30 seeds. Giant Gourd mix - 9 seeds - \$10 pkt. All prices include postage. Money back guarantee. Send your order to: The Gourdfather, PO Box 298EG, East Maitland, NSW, 2323. Phone (02) 4933 6624.

HUNTER VALLEY COURSES. Permaculture, organic growing. Small group learning at demonstration farm. Trevallyn Centre. For information: (049) 389 528, PO Box 22, Paterson, NSW, 2421.

HIBISCUS. Always propagating named hibiscus. Send SSAE for free list. Tube stock available most of year. Mail order our specialty. Tropic Gardens Wholesale Nursery, 4 Randwick Rd, Gympie, Qld, 4570. Phone/fax (07) 5482 4687.

ABOUT CANDIDIASIS - A SIMPLE GUIDE TO HEALTH AND FOODS. (Thrush, Candida Albicans) by Patricia A Pettit, ND SRN. \$8.75 includes postage. Send to PO Box 385, Coominya, Qld, 4311.

TRIDENT TIPIS, EARTHMOTHER CRAFT, professional craftsmanship, traditional designs, quality materials,

made to last for years and years. For catalogue, samples and prices, Lot 107 Cedar Ck Rd, via Millfield, NSW, 2325. Phone (049) 981 659; fax (049) 981 874.

COMPLETELY NATURAL SOAP'N'STUFF - For complete catalogue send 2 x 45¢ stamps: Aylwen's Herbary, Box 42, Yarralumla Post Office, ACT, 2600.

AT LAST! Inexpensive new design canoes and kayaks you can build and \$\$\$ell . . . fish-catching paddles, bait holding lures & more. Satisfaction guaranteed. <http://canoeworld.com>

LOOKING FOR HERITAGE OR TRADITIONAL FRUITS AND VEGETABLES? Join the Heritage Seed Curators Ass. and receive our magazine. The Curator, published 2 times a year. We still have copies of the 1997 Seed Listing issue giving sources for thousands of vegetables, herbs and fruit varieties. The best Australian Seed Source list! Membership is \$25 per year. Contact HSCA PO Box 1450, Bairnsdale, Vic, 3875. Phone (03) 5153 1034.

TREE ONIONS - BROWN \$1 ea. Red Hot Spicy \$5 ea, lim. sup. White & Brown Potato Onions \$1 each P&H \$3. Lindsay Morris, Newbury Corner, Trentham 3458. (03) 5424 1434.

TREES FOR FARMERS. www.nativenursery.com.au Mildura Native Nursery. (03) 5021 4117.

CRAFT WORKSHOP VIDEOS. Learn a new craft or extend your ability from your own personal highly qualified instructor without leaving home. Many crafts including spinning, weaving, feltmaking, beading, basketry, lace making. For full descriptive list please send long SSAE to Quick-spin Wool, RMB 1215, Shelford Road, Meredith, Vic, 3333.

LIQUORICE - Grow your own. All enquiries:- Liquorice, MS 726, Gunalda, Qld, 4570.

CRYSTAL WATERS PERMACULTURE VILLAGE. Half-day tours conducted on the 1st & 3rd Sat of each month. For information or bookings, ring James on (07) 5494 4787 or write "The Motivating Edge", 83 Crystal Waters, MS 16, Maleny, Qld, 4552. Bookings are essential.

COB EARTH BUILDING WORKSHOPS: Sculpture a house from earth, including arches, shelves, niches. Make a cob bread/pizza oven. Five-day workshops, Sat-Wed or just come for weekend. July 1-5, Sept 19-23. Contact Edible Landscapes, phone (07) 3870 3872; fax (07) 3870 5890.

STEINER EDUC. BOOKS. For school or homeschoolers. Write for titles list: Box 33, Brunswick Heads, NSW, 2483 or fax (02) 6680 4314.

SLOW COMBUSTION COOKING STOVE: Wood heating; large oven; excellent condition; size 855 x 855 x 625. Bargain at \$1400 ONO. Phone (02) 6550 7287.

LADY 52 with property in Gold Coast hinterland seeks to spend summers in Tasmania to escape the heat and enjoy meeting others in paying/work situation or combination - whichever suits. Perhaps you would like to escape the worst of your winter at my place? Please write or phone to discuss further if interested. Jenni Corlett, 21 Barakula Court, Cedar Creek via Beenleigh, Qld, 4207. Phone (07) 5546 4313.

CORK OAKS, harvest a renewable resource. Young trees 60 cm high. Climate range up to 1900 mm rainfall p.a. Notes on commercial use, on farm use, yields & culture with plants. 9 for \$37 or 18 for \$65 posted. Larger quantities on application. Credit card details to (02) 6342 2364, or cheque to John Hoile's Nursery, 44 Binni Creek Road, Cowra, NSW, 2794.

BUILDER WANTED NSW N.E. COAST. Seasoned Bush Builder/Carpenter with experience in all aspects of building using recycled materials. On-going project, somewhere incredible, in the hills behind Byron Bay - includes accommodation. Please write today: Leon Rubinstein, Industrial Salvage, PO Box 279, Elwood, Vic, 3184.

BAMBOO WORLD (Bamboo Rediscovered author) - Beautiful, non-invasive clumping bamboo nursery and display area with over 200 species, edible, structural, decorative, all sizes, tropical or cold climate. Edible shoot/timber plantation quantities available at reduced prices - plants or tissue culture plantlets. Freight to your door. For 32-page illustrated catalogue on selection, species description, usage lists, cold climate species, harvesting & treatment details, send \$3.00 IN STAMPS (or \$3.50 cheque or money order) to BAMBOO WORLD, Murwillumbah Rd, Wadeville, NSW, 2474. Inspection by appointment Tel (02) 6689 7214. Website <http://www.nrg.com.au/bamboo>

TASMANIAN "FLOAT LEAF" SEA VEGETABLES. From ice cold winter oxygenated waters near South East tip of Tasmania, are hand harvested, a tasty sea vegetable - "Float Leaf". Having been carefully dried under natural conditions for max. quality and longevity, some first grade stock 1996/97 remains: 250/50 and 25 gram bags. Also available - THE SEA VEGGIE COOK BOOK. Tel/fax (03) 9576 4165 or (03) 6298 1290, or web site c/- Dover telecentre: <http://www.tassie.net.au/Natural-Seafood>.

Melbourne outlet -The Vital Ingredient (03) 9696 3522, fax (03) 9696 5549.

HERBS. WANTED TO BUY. Organic or wildcrafted. Dried - esp. Echinacea, ginseng, valerian, St John's wort etc. Contact John Ross (08) 9754 3546. - 12 Fairbairn Rd, Buselton, WA, 6280. Email jrtc@netserv.net.au

TOBACCO SEEDS organically grown (Virginian), cultivation and curing notes included for \$5. Also available, "Australian Tobacco. How to grow, cure, treat and cut your own". A well-researched book by John van der Linden for \$15 (postage included) from Lyn O'Brien, c/- PO, Barmah, Vic, 3639.

PERMACULTURE 1998 COURSES. For the South East of Australia. Design Courses - 29th Nov to 11th Dec. Weekend courses 12th & 13th September. Enquiries Hugh Gravestine (02) 6494 2014.

PERMACULTURE DESIGN COURSES at Crystal Waters Permaculture Village. August 1-15, October 17-31. Practical residential courses for urban and rural dwellers. Topics include: design, species selection, vegetable gardening, orchards, aquaculture, water management, community development, tours of working Permaculture examples, and slides from around the world. Tutors: Morag Gamble, Evan Raymond with Max Lindegger and guests. Sustainable Futures, Lot 50 Crystal Waters, MS 16, Maleny, Qld, 4552, Phone/fax (07) 5494 4833, email: szygy@squirrel.com.au

NEEM ALTERNATIVES. Our focus is to help reduce use of chemicals. We propagate NEEM TREES from selected imported seed and make them available when about one year old. Propagation from seed only, not cutting, ensures tap root development, important for stability and drought resistance. Care sheet supplied with all trees and full advisory service for quantity buyers. 50 trees \$10 ea. 100 trees \$8ea. NEEM MOISTURISER. We make a blend of cold pressed oils including neem which is easily absorbed by the skin. Economical, only drops needed. Non-greasy. Wonderful for all skin types. No water, no chemicals. Mail order, P&H \$2.50, PO Box 400, Gatton, Qld, 4343 or see us at Toowoomba Markets: East St, Queens Park, Cabarlah. Unconditional money back guarantee if you don't love using neem moisturiser. 100 ml \$20. Single trees \$15. Phone/fax (07) 5462 9193, Mt Michael, Junction View via Gatton, Qld. Please phone first.

PERMACULTURE DESIGN COURSE - Newcastle and the Hunter Valley. The course venue is the Grey Gums Permaculture Garden at Toronto, from August 16th to 29th. Phone Andrew Murdoch for course details (02) 4950 4134. Property design and consultancy services are also available.

HANDYMAN REQUIRED FOR BD FARM near Perth. Permaculture experience preferred. Accommodation supplied - could suit retired man. 52 Clenton Rd, Gidgegannup, WA, 6083.

ASPARAGUS - Nature's gift to lazy gardeners. Once planted asparagus will produce incredible amounts of food for at least 50 years. Our vigorous 3-6 year old crowns produce large delicious spears within months of planting. 10 crowns \$30 post free, 20/\$50, 50/\$100, 500/\$750. Planting instructions provided. Asparagusto, Box 18, Booborowie, SA, 5417.

BOB MAGNUS'S FRUIT TREES. 100 varieties of Apples, Pears & Plums on dwarfing rootstocks (no may-poles!). 16 varieties of Quinces, Hazelnuts -please send 3 x 45¢ stamps for my 1998 list to . . . Bob Magnus, Woodbridge, Tas, 7162.

BOOKS, OLD AND NEW. Send for general list. R. Suters, PO Box 127, Figtreet, 2525.

EARTHWORMS. Books and videos on all aspects of worm farming: for profit, gardening, bait, waste management. Free list from WormWide Books, 20 Forest Ave(E), Kingston Park, SA, 5049. Phone/Fax (08) 8377 2668.

MARKETERS. Wish to market goods at markets in Perth. Please write to 7 Hefron Circle, Kalgoorlie, WA, 6430.

NATIVE STINGLESS BEES for profit or pleasure - how to get started. Pollination/honey potential in Queensland. Detailed information booklets, packed with photographs, diagrams. For free catalogue, send name, address & 45c stamp to: ANBRC, Box 74-G3, North Richmond, NSW, 2754.

ALLERGY-FREE HOLIDAY, Pelican Lagoon, Kangaroo Island. Walking, swimming, fishing, birdwatching. Lime-

stone house, no chemicals or zinc, safe for multiple chemical sensitivities, organic meals. Cheaper rates if helping with garden or housework. Phone after 8 pm (08) 8553 7224.

SOUTH COAST FIELD DAY for Sustainable Landuse and Sustainable Living. Landuse, Building & Technology, Forestry, Community & Cottage Industry. August 22nd and 23rd. Bega Valley. Enquiries (02) 6494 2014, 6492 7306.

FREE ACCOMMODATION on vineyard in South East Queensland for a viticulture/permaculture person. Reply to POB 12, Balaclava, Vic, 3183.

ORGANICALLY GROWN traditional herbal remedies for everyday conditions, arthritis, psoriasis, etc. For catalogue please send stamped addressed envelope to Tintagel Herbs, PO Box 27, Central Tilba, NSW, 2546.

TOBACCO SEEDS selected from quality plants. Organically grown. Seeds and instructions \$5. E. Madge, PO Box 114, Pomona, Qld, 4568.

FARM STAY - CENTRAL VICTORIA, chemical-free property, solar power, guest accommodation - double room, twin room, bathroom, WC, sitting room. Bushwalking, trout fishing, wineries, gold fields, etc. For information/bookings phone (03) 5473 3533.

A DISCREET NEW SERVICE FOR LOVERS OF ALL AGES. Experience the sensual feel of natural massage oils, aphrodisiacs and related products, now available through discreet mail order. SAE to Bluegum Natural Solutions, PO Box 378, Picton 2571 or (02) 4684 2987 for free brochure.

ADVERTISERS INDEX

3D Lights	13
Achievers Information	40
Amcer	60
Ausaxe	43
Aust. Ethical Investment	75
Australia Felix	33
Aust. Correspondence School	63
Australian Herbal Connection .	26
Bio Products	22
Bushfire Protection	27
Castworks	72
Composting Toilet Systems	63
Davy Industries	42
Dowmus Pty Ltd	33
DP Refrigeration	69
Dynamo Flashlights	78
EG Dog Soap	61
Rotaloo	53
Farming the Future Expo	43
Full Moon Imports	30
Gembrook Organic Ginseng ...	30
GJB Windrotors	72

Global Eco-Village Network	66
Glockmann-Peck Engineering	69
Going Solar	17
Gordon Wilson	27
Grandprians Solar	48
Greenpatch Seeds	26
Grimes and Sons	67
Hot Drum	77
Huff and Puff Constructions	25
Imagine Strawbale	67
Integral Environmental Energies	53
Jura Sol Industries	15
Kookaburra Park Eco-Village ...	29
Merry Hall	13
Nara Products	61
Natureloo	22
Ned Kelly Wood Heaters	37
Nullarbor Forest Timber Industries ...	15
Peter Lees	19
Planet Natural	57
Precision Wind Technology	57
Quick-Spin Wool	21

Rad-Pads	25
Rainbow Power Company	21
Renewable Resources Workshop ...	40
Rivers Pacific Earthworms	50
Safe Rain	60
Scandia	55
Secrets of Feng Shui	42
Shower Power	14
Solar Safe	39
Solarcharge	35
Solazone	51
South Coast Field Day	32
Southwest Solar	68
ST Trailers	14
Starting Point	51
Strath Steam	49
Sun Real	78
The Everburning Light	49
The Food Forest	48
The Mud Brick Circus	39
Unconventional Homes Tour	36
Victorian Treecrop Nursery	32

LAND LINES

LAND LINES are for people buying, selling, seeking or sharing houses and land. It is your responsibility to check all deals. We charge a rate of 50 cents per word (prepaid) for a listing of any desired length. All **LAND LINES** should include your name and address (phone number is optional).

Please also name your nearest large town (eg, "50 km north east of Lismore").

LAND LINES for the September issue should arrive at RMB 427 Trentham, 3458, by 1 August.

We simply cannot take **LAND LINES** over the phone — please don't try.

NEW SOUTH WALES

1. ORGANIC VEGETABLE HERB FARM. 100 acre bush block with 2 acres intensive production area, NSSAA Cert with irrigation, machinery & packing shed, poultry yards and orchard. Deliveries to Canberra 80 km and Goulburn 50 km. Nearest town Tarago. Wildlife refuge. Two bedroom cottage, wood heater, air conditioner, power, phone, 2 dams, 1 natural waterhole on seasonal creek. For lease or sale. (02) 4844 5297.

2. BUILDER WANTED NSW N.E. COAST. Seasoned bush builder/carpenter with experience in all aspects of building using recycled materials. On-going project, somewhere incredible, in the hills behind Byron Bay - includes accommodation. Please write today: Leon Rubinstein, Industrial Salvage, PO Box 279, Elwood Vic 3184.

3. SECLUDED BUSH RETREAT. 130 acres Tabulam. Near Casino, tall millable timber for you to build your log cabin. Two dams, two cleared house sites. Bargain \$35,000. Phone Keith (02) 4844 5420.

4. FAR NORTH COAST. Beautiful 3 brm house, 2 acres, huge verandahs, polished floors, cathedral ceilings, stained glass entrance, solar/hydro power, combustion stove/3-way hot water, self-contained 2 brm cabin, shed and carport, 2 creeks, 5,000 gall holding tank, established organic gardens, fenced vegie garden, rainforest regrowth, plenty of wildlife, strata title, pre-, primary-, Steiner-schools, shop within 10 km, school bus service into community, community established for 16 years, 35 km NW Lismore. 65 km from coast, \$120,000 neg. Phone (02) 6621 3889.

5. COLLOMBATTI (15 minutes Kempsey) 32 acres/dam, no pesticides 20+ years. Flood free route. Loads of potential. Needs attention and care which I'm unable to give. All reasonable offers considered. Phone (02) 6737 6661 for map.

6. BYRON HINTERLAND, approved MO on 33 north-facing acres. 3 shares with houses, dams and catchment only 25 min to Byron Bay and 20 min to Lismore. Asking \$465,000. Contact Erik Bigalk on 0419 270 250 or at Ray White, Byron Bay.

7. NYMBOIDA BUSH BLOCKS, 45 km Grafton, secluded but not isolated, alternative community, close Nymboida River, timbered, beautiful house sites. 100 ac \$57,000 ono, 370 ac \$97,000 ono. Phone (07) 5445 8730.

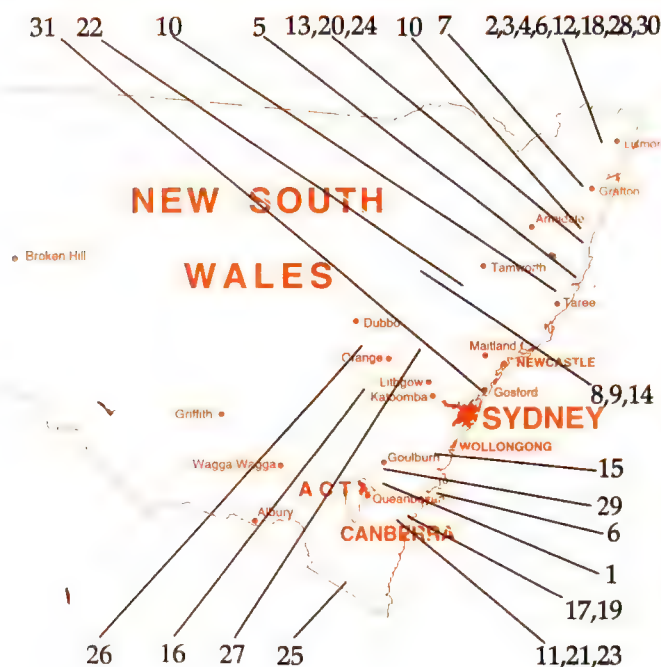


8. NEXT TO WARRUMBUNGLES NATIONAL PARK. Three bedroom mudbrick house on 50 acres. Approximately 10 acres cleared. Established orchard, bore, solar panel. Power available close by. Close to school bus, Coonabarabran 15 minutes. \$150,000. Phone after 8pm. (02) 6542 2452.

9. WARRUMBUNGLE MOUNTAINS: Luxury mudbrick home on 115 acres native bush, edge National park, including Castlereagh River headwaters, picturesque canyons. Seven metre deep/twenty metre long permanent water hole in river provides great swimming. Springs and dam. Coonabarabran 15 minutes. Three bedrooms, built-ins, ensuite shower plus bathroom with massive spa, laundry, huge kitchen, wall oven, ceramic cooktop, carpets/cork tiles, vast lounge, Cypress-lined cathedral ceilings, dining area, Ironbark feature beams. Phone & power, rainwater to house. \$230,000 ONO (08) 8431 5008.

10. NANA GLEN RAIL, 25 km west Coffs Harbour. Cleared 2 acre block, zoned 2B, creek frontage, power, water, phone. Great views, nice neighbours. \$40,000 negotiable. Phone (02) 6548 2427.

11. BEAUTIFUL BUSH RETREAT BODALLA Quality 22 square mud brick home on 40 acres. 30 acres bush, 10 acres fertile



cleared. Permanent creek. Pure water. Privacy. Passive solar design. Three large br. oregon, cedar, Tas. oak timber. Huge double garage/shed. 20 mins to highway, school, shops. 3 mins to school bus. \$135,000 neg. Phone (02) 4474 3513 or (02) 4473 5530.

12. COFFEE CAMP, 24 km north of Lismore, 25 chemical free acres, permanent creek frontage, established fruits, nuts, olives, coffee, cabinet timbers & rainforest pockets. Renovated colonial homestead, 3 double bedr & study, 2 bathrooms, wide verandahs, studio & double carport. \$195,000 Phone (02) 6689 9296/6621 3475.

13. BELLINGEN/THORA Riverfront, 1/4 share, 55 certified organic acres. Stunning National Park views. Swimming. Part completed passive solar mudbrick house. Caravan. Communal orchard. Irrigation. Council approved. Friendly co-owners. Steiner, state schools. \$82,000. (02) 6655 9204.

14. WARRUMBUNGLE RANGES/COONABARABRAN 620 acres, small house, large living area, on site van on piers, both wired 24/260 volts. Solar/wind powered and back-up generator. It's virgin bush, plenty of wild life, walking/driving tracks, 2wd accessible. Tractor, lifting implements, sawmill/slab cutter, wood-working lathe, planer/thickener. Machinery & solar/wind & gene equipment and house & land \$158,000; solar/wind & gene equipment & house & land \$138,000; house & land only \$108,000. Please ring George or Liz on (07) 4786 3433 or (04) 1762 5892 or (02) 6842 2443 if one of these packages interests you.

15. MITTAGONG, 10 km middle of nowhere, 100 acres & 2 br brick cottage surrounded by thousands acres natural bush. 40 acres cleared, fenced. Spectacular views, creek, yabbies, wedgetails, lyre birds, wallabies, wombats. Ultimate tranquility. 1 1/2 hours from Sydney. \$205,000 Phone (02) 4684 1907.

16. IRRIGATED FARMLOTS FOR SALE IN LACHLAN VALLEY, NSW. Thirteen 8-hectare lots in a co-operative subdivision under the Community Land Development Act 1989.

Scheme allows full management freedom to lot owners, within organic covenant. Ample space provided for Community roads, windbreaks, buffer zones and habitat. Large Community Lots for residence and plant & equipment. Land "in conversion" and suitable for diverse horticultural use. First Lot planted to winegrapes, with markets assured. All management and contract services are available. This unique framework allows you to join a community with a common interest in sustainable production to supply the growing organic market. Contact Richard or Sam Statham, Rosnay, River's Road, Canowindra, NSW 2804. Phone (02) 6344 3215, fax (02) 6344 3229 statham@lisp.com.au

17. DEUA RIVER NATIONAL PARK - 15 mins Moruya. River frontage, 60 acres -8 acres manageable paddocks, some rainforest, 3 brm home, school bus, phone, solar. Offers for quick sale. Evenings (02) 4474 3091.

18. FAR NORTH COAST, 35 KM NW LISMORE. Beautiful solid spacious home. Wide verandahs. Elevated position. Extensive views. 4 acres. U/house garage and workshop. Organic gardens. F/trees. Complete privacy. Power, telephone. Cabin, U/cover caravan. School buses. \$159,000. Ph. (02) 6633 7033.

19. SECLUDED BUSH BLOCK (36 ha) on Burra Creek, adjacent Deua National Park, 20 km west of Moruya. Pristine perennial water supply; ca 5 ha cleared including alluvial creek flat & small orchard; remainder bush with rich flora & fauna. Fully fenced, building permits available. \$129,000. Ph. (02) 6658 5974.

20. PERMACULTURE PARADISE. 58 acres, 4 bedroom house, 15 minutes Nambucca Heads, 12 mins Valla Beach, ocean view, rainforest, 2 boundaries State Forest. Hundreds of varieties tropical fruits, nuts, bushucker, vegies & herbs in established Permaculture teaching garden - TAFE & Skillshare field trips. 3 x 1/4 shares for committed Permaculturists. \$45,000 per share. Ph. (02) 6569 5360.

21. SOUTH COAST NSW. 35 km inland Bodalla (mainly unsealed/forest road). Tranquil 75 acres, remote bush, Tuross River frontage, timber dwelling, small orchard, ideal as shared retreat, \$95,000. Phone (02) 4473 8459.

22. UPPER HUNTER VALLEY. Peaceful retreat, 30 km south of Merriwa. 40 ac. property on permanent river surrounded by national park. Large 3/4 bedroom home. Combustion heater in lounge. Slow combustion cookstove in kitchen - heats hot water. Generator, water pumps, new carpets, septic, established gardens, fruit trees. Abundant wildlife. Phone connected. Priced to sell. \$88,000. Ph. (02) 6548 2837.

23. INVESTMENT/RURAL RETREAT. 20 km inland from Bodalla, far south coast of NSW. Approx. 45 ac. Split log home (white cypress plantation timber), colourbond roof, 16 sq, permanent water (Tuross River), septic, power, phone. Finals not done. 5 ac is river frontage paddock - partially fenced. LPG cooking/heater and also large woodfired heater. \$128,000. Call (02) 4474 2736.

24. MACKSVILLE, 200 ACRES. 1/2 cleared. Rainforest, dams, creek, fruit trees, cattle yard, large shed, tractor, handy school, 15 mins. beaches. \$180,000. Phone (02) 6569 9218.

25. RARE PRIVATE LAND in area of National Parks and State Forest inland from Eden on the far south coast of NSW, near the

Victorian border. Owned for over 30 years, we are now too old and fragile to think of living there or developing it. Two blocks, each with long creek/river frontage and access from 2 sides. All forest, good soil, plenty of water, wildlife galore. Your own private wilderness, or share with friends or perhaps sell some, keep some. 120 acs \$79,000; 220 acs \$129,000. Please ring (02) 4784 1020.

26. WELLINGTON, CENTRAL WEST, NEW SOUTH WALES. Almost 2 acres with 2 bedroom (each with en-suite). Double brick home built 1984. Spacious kitchen, study, open fire, reverse cycle air-conditioning. Large stained glass window, double garage, separate accommodation with en-suite for visitors. Fronting the Macquarie River, 2 minutes from town centre and only 200 m from High School. Rural outlook, established fruit trees and fertile river soil. A comfortable way to live or retire if you want to fish on your own riverbank, have a nice garden, some sheep and a few chickens in a delightful country town. \$160,000. (02) 6845 2280.

27. MUDGE/ILFORD, 5 acres with modern 3 bedroom home. Expansive views from northern verandah over secluded valley. Sheds, delightful gardens, tanks and permanent creek, 3 way bathroom, power, phone, 25 minutes to Rylstone, 2 hours to Penrith. Good weekend hideaway or cosy private cottage, \$89,000. Phone Maureen (02) 6379 1406.

28. KYOGLE (NSW) DISTRICT HOME WITH RIVER FRONTAGE. renovated 3 bedroom home on 3 1/2 acres. Features pine timber linings, spacious carport for outdoor living. Daily bus and mail service. 3 km local school, 15 mins Kyogle, 1 hr Lismore, 2 hrs Brisbane. 40/20 ft steel frame shed (cement floor) with power and water currently rented out. Could run horse or cow or market garden. \$95,000 ono. Phone a/h (02) 6636 4279.

29. BUSH RETREAT, GOULBURN AREA. 30 acres, dam, permanent creek. Very comfortable council approved weekender. \$52,000. (02) 4869 2367 evenings.

30. NIMBIN. MO share with stunning panoramic views over Tweed Valley. 440 metres above sea level (not steep!). Borders national park. Dams, creek, good all-weather road. Totally private. Nothing beats this. \$56,000. Ph. (07) 5495 5769.

QUEENSLAND

1. NOOSA. Rare 11 acres, 10 minutes shops/beaches, private, rainforest/creek, abundant water, organic garden, room for orchards/crops. Lovingly crafted earth brick cottage, silky oak windows/french doors. Investment assured, prestige area, rezoned future sub-division if desired. We have spent seven wonderful years here, this can be your time. \$325,000. Tara (07) 5449 1186.

2. EDMONTON - 15 km south Cairns, 1/4 acre, 3 bedroom house, verandah, carport, established fruit trees (15 varieties), organic vegie garden, fully fenced backyard, large chicken coop/aviary, close bus, schools, shops. \$135,000 neg (07) 40 555 696.

3. QUEENSLAND. GIN GIN. 50 km Bundaberg. Kookaburra Park Eco-village 1 ac with 360 ac parkland all facilities. Freehold \$30,000. May part trade or vendor finance. Phone (07) 4157 2850, some work available.



4. TORBANLEA. 25 km N of Maryborough. Weekender, part furnished, pergola, garage/sleepout. Natives/fruit trees, rockeries. 1 ac fenced. All services. \$55,000 ONO. Phone (07) 4124 9787.

5. 1770 - BUNDABERG AREA. 42 acres of natural bush, power at block, bitumen road front. Beautiful area, good fishing. \$28,000 ONO. Send S.A.E. to PO Box 8532, Mt Pleasant 4740.

6. SECLUDED COUNTRY COTTAGE, 1 1/4 acres, creek, power, phone, wood stove, fruit tree, Caboolture Shire, Mt Delaney. \$75,000. (07) 3205 2599, 5496 3518.

7. KONDALILLA Rainforest, gardens, creek, create privacy for unique home. 15 mins drive Maleny, Nambour and beaches. Verandahs, hardwood timbers, octagonal design, hot-drum, extras. Price \$149,000 Phone (03) 6343 0151.

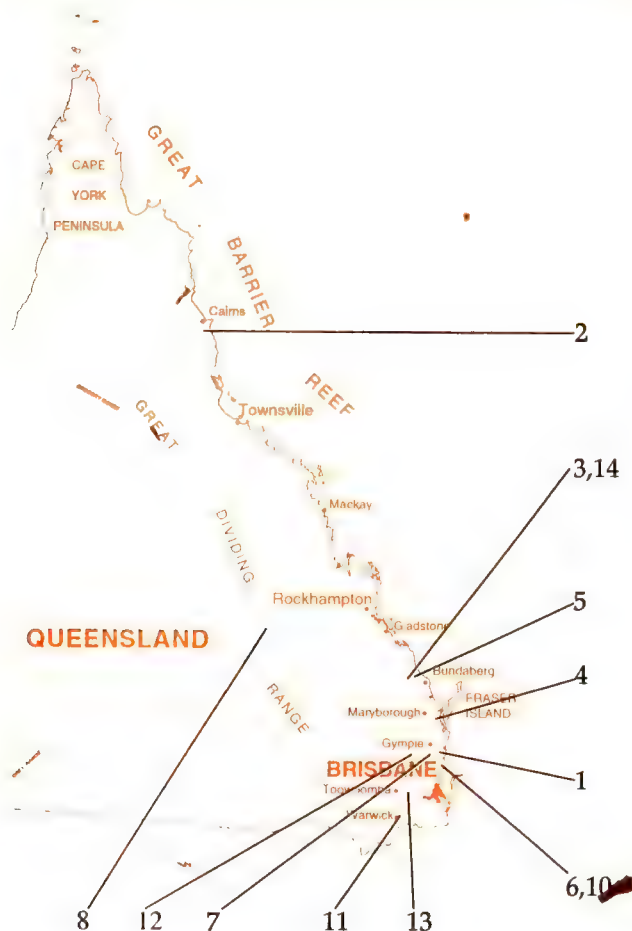
8. FOR SALE ON CENTRAL QUEENSLAND SAPPHIRE FIELDS. Large two storied, concrete brick, self-contained complex, 95% complete. Total area 623 sq m. Splendidly isolated but only 15 min by bush track from Rubyvale shops and post office and 1 hr on sealed road from Emerald, business capital of Central Queensland Highlands. Sapphire digging reserves within immediate vicinity. Excellent tourism potential. \$110,000 Phone (07) 4985 4252 for details.

9. SE QLD, MUDBRICK HOUSE. 10 x 16 m and verandahs with part earth roof and floors in three bedrooms. Combustion stove and three-way hot water system. Office 7 x 8 m clayblock, three bay carport, small shed on 1 1/2 acres bounded by creek. Vegetable garden and some established fruit trees. \$145,000 (07) 5486 5230.

10. MALENY-CALOUNDRA AREA 17 acres in beautiful riverside valley. Timber house, cabin, swimming pool, barn. Growing avocados, mangoes, cabinet timbers. \$295,000 (07) 5494 7927.

11. HOLIDAY HOME OR NEWLYWEDS' FIRST HOME in Qld. Emu Vale, 26 km east of Warwick. Beautiful views in lovely valley. 10 mins walk to school. Tastefully repainted, 3 bedroom Queenslander. New garage/shed. New kitchen. Bathroom renovated with 125 litre mains pressure HWS. Nearly new water pump on 2 large water tanks. Fenced. 9 acre (subdividable), rich black soil. Walk in walk out, furnished including refrigerator (frost-free), microwave, crockery, cutlery, utensils, glassware, Queen-size bed, bed linen, towels, everything needed to stay! \$85,000 ono. Phone (07) 4664 8358.

VICTORIA



12. KINGAROY. 2-1/2 to 3 hrs drive from Brisbane and Toowoomba. Spacious 2-bedroom home, fireplace, wrap-around verandahs; 4-bay shed/workshop; former shop and attached plant nursery. All on 5 chemical-free acres; established organic cottage, herb and veg gardens; orchard; chook pens. 10,000 gall rainwater storage plus town water. Attractive rural setting 6 mins from town. Abundant native bird-life. \$150,000. Photos and details available. (07) 4162 3359.

13. THORNTON-LAIDLEY. 180 acres, 1.5 hours Brisbane, 20 km Laidley, includes 20 acres irrigated creek flats, bore, pump, spray lines. Near new brick home on elevated site overlooking valley, power, phone, all bitumen roads. 2 sheds (18 m x 9 m - 9 m x 6.3 m). 20,000 gallon concrete tank. Cattle yard, loading ramp. \$285,000. Phone (07) 5466 7165.

14. PERFECT FOR PERMACULTURE OR RETIREMENT. Only 25 mins to Gin Gin, 1 hour to Bundaberg. On school bus route. Secluded, timbered, 10 hectare gently sloping, valley bush block, with sandy loam. Creek front and rear. 5 meg. dam plus ponds. Established fruit trees. Water and wildlife in abundance. Newly fully-fenced. Adjacent to bush land, opposite reserve, 9 m x 12 m steel-frame home to basic lock-up, with compost toilet. Plus 9 m x 9 m x 3 m high Nusteel shed. Complete with livestock. Many extras. Ill health forces move. for quick sale only \$69,800. Phone (07) 4157 6540.

1. HORSHAM - WESTERN VICTORIA. Wildlife haven. 9 km south Horsham. Approx 40 ha. 1/3 cleared paddock, rest bushland. Abundant birdlife, many rare species. Bought by Trust for Nature to protect this rare woodland and associated threatened birds. Money from re-sale will purchase more threatened bushland. Block will be sold with protective conservation covenant. Covenant allows for house, stock on the paddock, permanent protection of the woodland. The land is next to two other bush blocks which altogether form a sanctuary of 100 ha. of bushland. The adjacent owners are committed conservationists. Ideal as bush hideaway while still being close to large provincial town. Horsham thriving country town with all facilities. Good fences. All weather road to gate, power and phone nearby. \$75,000. Contact Barry, Trust for Nature (03) 9670 9933 or barryt@tfn.org.au

2. GRAYTOWN, VICTORIA. Large 5b/r home on 5 acres, log-cabin style. Normal electricity; two phone connections. 3 rainwater tanks; excellent dam. Nice views; good neighbourhood. Casual work close by (vineyards). Enormous shed; three-car carport. 25 minutes Nagambie/Heathcote; 40 minutes Seymour; 1 hour Shepparton/Bendigo; 1 1/2 hrs Melbourne. \$100,000. Phone (03) 5794 9292.

3. MANANGATANG DISTRICT 0.6 ha, solid brick historic home. Three double bedrooms, wide verandahs. Pressed metal ceilings, polished floorboards. Ducted evaporative airconditioning, gas heating, town water. Modern kitchen and adjoining dinette. Doors opening onto verandah from most rooms. Well fenced yards, native and fruit trees, established cottage gardens. Paved entertaining area with barbecue. Four kennels with cement runs and exercise yard. Surrounded by natural bush land and reserves. Adjoining land possibly available for lease or sale. Located just 5 minutes from Manangatang and 1 hour to Swan Hill. Priced to sell at \$44,500 neg. Contact Keith Tyers on (03) 5026 4100.

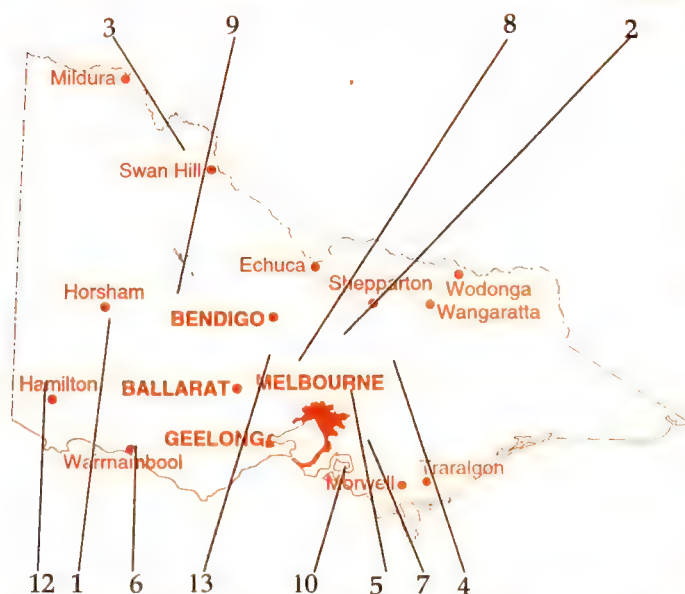
4. MELBOURNE, 1-1/2 HOURS. Undulating 27 acres native bush block off the Maroondah Highway, close to Cathedral Ranges. Fern gullies, views, beauty and seclusion, ideal 'Land for Wildlife'. Driveway to house site and dam, power available. Inspection will confirm this quality property. \$79,500 ono. Call owner (03) 5976 1090 anytime.

5. MELBOURNE, 36 km NE of city in St. Andrews. 18 acres of bush and cleared paddocks, huge dams, orchard, excellent poultry sheds, productive vegetable gardens, storage cellar and ample shedding. Comfortable four bedroom house with three living areas. Peace and quiet, lovely views, good local community, close to all amenities. \$299,000. Ph. (03) 9710 1238.

6. TERANG/WARRNAMBOOL. 17 acres good sheltered pastures. 3 bedroom renovated cottage, shedding, excellent views, 6 km town, schools, shops, race and trotting tracks. Ideal horse stud. \$95,000. Phone (03) 5592 1946.

7. DANDENONG RANGES. 5 1/2 ac, 4 b/r old home. Wood-fired water heater, Rayburn stove, tanks, paddocks, ample shedding, large veg. garden, large garage, 1 1/2 ac fern gully, views. Close to shops/schools in Monbulk. \$195,000. Ph. (03) 9756 7150.

8. WELSHMAN'S REEF. Mudbrick cottage, 2 bedrooms, attic studio, Coonara wood heater, gas cooking, power and phone on 1/2 acre with established native gardens, fruit trees, roses, etc. 20



minutes to Castlemaine, Daylesford. Ideal retreat or permanent living. \$69,000 ono. Ring Sue (03) 9808 1535.

9. THE GRANITES. 13 km east of St. Arnaud. 121 ha (300 acres) grassland, box-ironbark forest on granite hill. Great views. No stock for 3 years. Extensive regeneration. Flora/fauna include wedge tailed eagle family. Conservation covenant condition of sale. 2 small dams, water tank, reticulated pipe to caravan site. \$62,000. Ph (03) 5439 7284 Mrs B. Delaney. Ph (03) 9481 0232 Ms Delaney.

10. FRENCH ISLAND in Westernport Bay. No rates! Beautiful 40 acres of pasture, fully fenced, with dam. Fantastic sea views. FI is all farmland and National Park with a population of 80. No services except telephone -it's like stepping back in time. A truly self-sufficient lifestyle possible here. Offers around \$60,000. Ph (03) 6266 3473.

11. YARRA VALLEY. Community property of professional environmentally conscious people. 148 acres - mix of rolling pastures, natural bush. Fertile mountain soils, abundant water (creeks, dams, river frontage). Gullies lined with tree ferns, prolific native wildlife. In a hidden valley with meandering walking tracks, panoramic mountain views. Original farm house, large barn, kitchen, extensive bunkhouses and shedding. Tel/SEC connected. Close to schools, shops. Shares available \$37,750. Tel. (03) 9737 0883 or (03) 9729 5531.

12. FORCED SALE. COLERAINE. 20 mins to Hamilton. 1/2 acre, fenced 1989 cottage, 2/3 bedrooms, lounge, modern kitchen, laundry, bath, loo & store room. Outside are 3 steel sheds & craft room. Town water, electricity gas & tank water, phone walk to shops, PO, bank, hospital, school and pubs. Fruit trees, lovely neighbours, 1 hr Portland. Mt Gambier, Warrnambool, Hall's Gap. Trout fishing, yabbies. \$37,000. Kay, bh (03) 9428 4925, ah (03) 9689 5669.

13. CASTLEMAINE/CHEWTON \$190,000. 43.3 acres of native bushland. Mudbrick split level 6 room home. Balcony, verandah, cathedral ceiling, pot belly and slow combustion stoves, OFP, LPG. Studio home comprising railway carriage with huge stone addition, OFP, solar power, established garden. Cabin with pot belly stove. All with views. 5 dams. Phone (03) 5472 4027/(03) 9396 1997.

SOUTH AUSTRALIA

1. KADINA, YORKE PENINSULA. Vege garden, fruit trees, herbs, natives & chook houses. 3 bedroom family home of large proportions. Open plan living, s/c heater, large pergola area, huge brick garage, rain tanks and mains water. All on 1 acre, 10 km from Kadina on school bus route. A comfortable home with many extras. \$87,000. Ph. (08) 8821 3560, E-mail leavre@kadina.mtx.net.au

WESTERN AUSTRALIA

1. FOR SALE: half share in 138 acres bush block with various wet ponds. Lots of flora and wildlife. Very peaceful lots of water, good potential self sufficient farm, suit family with kids, 30 km Manjimup, WA. \$45,000. Phone (08) 9777 1426 or (015) 637 538.

TASMANIA

1. NORTHERN TASMANIA: NEAR SHEFFIELD 55 tranquil acres, views to Cradle Mtn, Bass Strait. Third forest, remainder organically improved pasture. Own hay, firewood. Comfortable 3 bdrm timber home, central heating. Orchard, established gardens, century old cypresses, 3 metre holly hedge. Huge restored barn, excellent sheds, original stables. Permanent spring water plus creek. Great tourism potential, close to Lake Barrington, wineries, lavender farm. School bus to Sheffield, 35 mins to Devonport, 1 hr flight to Melbourne. Property established as alpaca stud. Outstanding lifestyle opportunity. Offers around \$180,000. Phone (03) 6397 6101/(08) 9561 2359.

2. NORTHERN TASMANIA - LOONGANA, 30 km North Cradle Mountain, 150 acres native forest, frontage onto River Leven, views of Black Bluff ranges and Loongana valley. Fantastic house site, abundant wildlife, secluded, 40 mins to Devonport, very reluctant sale of a piece of genuine wilderness. \$85,000 to buyer committed to not clearfelling. Phone (08) 8373 2436.

3. NTH TAS, GEORGETOWN, 1/2 partnership, 100 ac. bush block, 2 bedroom cedar house, privacy, sea views, power, telephone, spring water, 30 minutes Launceston. Has sandstone, producing craft and cleaning products. \$89,000. Ph (03) 6423 4517, (03) 6343 2199.

ACT

CANBERRA - COUNTRY MEETS CITY. Passive solar, double brick, 2 bd house with separate office/retreat. Private, 1100 m2 block opens to reserve -fabulous views of Canberra and Brindabellas. Watering system throughout garden. Ponds, rock walls, vegies, fruit trees, natives. Double carport, slow combustion heater, dishwasher. 10 minutes from city centre. \$155,000. Phone (02) 6241 3163.

FOR RENT, WANTED

KOOKABURRA PARK ECO-VILLAGE. 3 bedroom home for rent. Try living in a safe, clean, quiet village on 1 ac with 360 ac of parkland to walk around and friendly organic minded neighbours. 2.5 km to Gin Gin High school and 3 primary schools. Work available. Phone (07) 4157 2850.

WHITSUNDAYS, 5 ACRES. 1/2 acre intensive perm.cult. 36 m2 shed, power, telephone, bore-water. Close to school, servo, Post Office, beach. To let, minimum 1 year. (07) 4947 5727.

LATE LAND LINES

NEW SOUTH WALES

31. CENTRAL COAST RAINFOREST RETREAT — HOLGATE.

8 minutes from Gosford, 7 minutes from Terrigal. Walk to the sounds of bellbirds, whipbirds, lyre birds, regent bower birds, and gaze into your own rainforest of cedars, coachwoods, palms, ferns etc. Wildlife includes wallabies, bandicoots, possums, gliders, frogs, yabbies etc. Property is 6 acres of chemical-free rainforest, permanent creeks, bush foods, permaculture-style and ornamental gardens (all low maintenance), kids paradise playground. Home is 4 BR, 2 bathroom, solar-efficient warm earth interior, S/C fire (free firewood), 2 car accommodation, beautiful views into rainforest. Extras: pumps, chook pen, greenhouses, irrigation, workshop, sheds, and walking tracks. Location, minutes to beaches, shops. Schools (including Steiner), 40 minutes to Sydney/Newcastle (easy commuting). Privacy is assured on this peaceful, rare to find acreage. "Get out of the rat race and move to paradise..." Phone for details: (02) 4367 6167. Asking price: \$395,000.

Earth People Write continued from page 75

A sustainable professional community

Dear Earth Gardeners,

We are in the early stages of planning a working studio with extra resources for teaching and learning arts, crafts, music, gardening, technology and computers, all with a focus on a sustainable future. It is to be financed initially by ecologically sustainable funds and later by individual contribution. The site will aim to be self-sufficient, except for a link to the Internet to reduce travel and to promote the work and ideals of the studio. We intend to co-operate with any similar established sites, and we could even be one campus in a larger alternative university.

The people who are developing this plan are young, passionate, and very creative professionals renting in major cities, so what we lack is land, money and experience. We would greatly appreciate some advice or comments on the following: Location: at least a partial bush setting with water, preferably near the Great Dividing Range. Are there any ideal areas? Financing: Any recommendations or advice, ecological funds

or grants? Similar establishments: Where are they? How have they done it?

In many ways, our dream is your dream because we are heavily influenced by our concern for the future of life on this planet. We are also interested in your dreams and visions of the future and invite you to share them with us. We thank Earth Gardeners of the past for the invaluable inspiration, and look forward to a long, fruitful association with the Earth Gardeners of the future.

On behalf of the group, Stephen Black, 2/109 Fyffe St, Thornbury, Vic, 3071; e-mail (sblack@enternet.com.au).

Feeling pessimistic

Dear Earth Garden,

I heard on the radio tonight that an Alan Gray was arrested at the Jabiluka uranium mine blockade in Kakadu. If that was you guys — good on you. I must admit to being pessimistic as to your eventual outcome. Big business is too powerful now. Us sensible people form too small a group. Carol and I do our bit to overcome the corruption in our society by not participating. We don't buy very many goods or services. We are very frugal. We produce most of our own food. Any income we get goes to enriching our 40 acres. We do still spend a little money on corporate Australia, but as little as possible. We are just one small leak in the waste, pollution and just plain stupidity of all those whom we let into power.

Michael and Carol, Gympie, Qld, 4570.

Information on herbal medicine courses

Dear Earth Gardeners,

I am seeking information on courses in Australia which give detailed knowledge of herbal medicine. If you know of such courses or could refer me to someone to write to, it would be appreciated.

Janet M Wroth, 2 Clements Rd, Booragoon, WA, 6154.

Want to move? Talk to us

Dear Alan,

I wanted to let your readers know that we also had a dream of country living. Two-and-a-half years ago we moved up from the Mornington Peninsula, Victoria, to set up our property. With very limited finance and a lot of work on the land, we are well on the way. It is a wonderful lifestyle, and we would like to share our experiences with other city folk who are thinking about it but are not quite sure.

Denise R Hodson, Berrimer Farm, PO Box 50, Elphinstone, Vic, 3448.

Swap trade skills for beach holiday

Dear Earth Garden,

I am in the fortunate position of owning a home and unit in a secluded forest location at a beach resort. I am rich in every way except for income. As a sole-supporting mother of two boys, I have neither time nor cash for the maintenance, repairs and landscaping required on my property. Should you have trade qualifications in carpentry or plumbing, or experience and energy for landscape and gardening work, you might like to negotiate a trade — time in my beautiful self-contained unit in exchange for some hours of your time! I'm particularly keen to install flashing to the sides of shower recesses (an earlier builder skimped on it), reuse my greywater in summertime, convert my electric hot water to wood-fired heating (I've a Nectre stove/heater to which a water sleeve can be fitted), build a small chook yard, gradually terrace my sloping block and so on.

Anne, ph: (03) 5289 1590.

Books on organic farming

Dear Earth Garden readers,

If anyone could point me in the direction of books or pamphlets on organic farming, particularly in relation to livestock, I'd be most grateful. We're a family with three small children, and 18 months ago moved here from the Gold Coast in search of a healthier lifestyle and a safer environment to raise children. Later this year we will be buying a property of 40 acres or more. I would be delighted to meet anyone interested for a chat. Keep up the great work with the magazine, and keep happy!

Adrienne Roden, 13 South St, Gatton, Qld, 4343.

Dear Adrienne,

We're posting you the 'Good Life' book club catalogue. This tells you about many books that you're looking for.

— Alan.

Where can I find a distillery unit?

Dear Earth Garden,

I am interested in buying a hobby farm next year, with many different interests in view. At this stage I am compiling information and costing. One of my main interests is in essential oils. I need more information on this. I do know I would need a distillery unit. Could you let me know where I could buy one (or how to make one)?

E Bodel, Mayfield, NSW.

A selection of sustainable living books available from *Earth Garden*. For the full list of 100 books, see 'The Good Life Book Club' catalogue (available free). Phone The Good Life hotline on: (03) 5424 1814.

Please add postage, and allow 3 weeks for delivery.

1. The Earth Garden Book Of Alternative Energy (176 pages) - \$24.95 (add postage) \$
2. The Earth Builder's Handbook (80 pages) - \$9.95 (add postage) **NZ** \$
3. The Australian Self-Sufficiency Handbook (340 pages) - \$29.95 (add postage) \$
4. The Earth Gardener's Companion, 2nd Edition by Jackie French - \$9.95 (add postage) **NZ** \$
5. Earth Garden T-shirts SIZES: SM(16), M(20), L(24), XL(28) \$16 (add postage) \$
6. Earth Garden Bib & Brace overalls SIZES: SM(77), M(87), L(97), XL(107) - \$44.95 (add postage) \$
7. Earth Garden Natural Dog Soap - 3 for \$8.95 (add postage) \$
8. Jackie French's Backyard Self-sufficiency - \$16.95 (add postage) \$
9. The Settler's Guide - \$24.95 \$19.95 (add postage) \$
10. Earth Garden Building Book - \$35.00 (add postage) \$
11. The Hard Times Handbook \$16.95 (add postage) \$
12. EG Binders (hold 9-12 copies) - \$14 each (add postage) \$
13. The Healthy House Cow - ~~\$18.00~~ *NOW ONLY \$12.00* (add postage) \$
14. Jackie French's Companion Planting Guide - \$9.95 (add postage) \$
15. THE LOT: \$285 (Except EG 2,3,10,13-15,25,29,50,68,69 - Out Of Print) **FREE INDEX!** (add postage) \$
16. Single issues: \$4.50 each, or 10 for \$34.95! (Except EG 2,3,10,13-15,25,29,50,68,69 - Out Of Print) \$
17. The Seed Savers' Handbook - \$20.00 (add postage) \$
18. Herbal Harvest - \$95.00 (add postage) \$
19. Jackie French's Chook Book - \$12.95 (add postage) (BACK IN STOCK) \$
20. Organic Gardening in tropical climates - \$12.95 (add postage) \$
21. The Straw Bale House - \$49.95 (add postage) \$
22. Herbal Health - ~~\$19.95~~ *NOW ONLY \$12.95* (add postage) \$
23. 2 Minutes a Day for a Greener Planet - ~~\$14.95~~ *NOW ONLY \$9.95* (add postage) \$
24. Earth Garden 25 Year Anniversary Enamel Cup - \$8.95 (add postage) \$
25. Warm House Cool House — \$27.50 (add postage) \$
26. The Compleat Earth Garden Index (EGs 1-100) - \$3.95 (add postage) \$
27. The EG 25 Year Anniversary Dunny Door Poster - \$3.95 (add postage) \$
28. Bamboo Rediscovered — \$14.95 (add postage) **NZ** \$
29. Making Money From Your Garden by Jackie French — \$9.95 (add postage) **NZ** \$
30. Back To Basics — \$57.00 (add postage) \$
31. Backyard Poultry - Naturally by Alanna Moore — \$26.95 (add postage) \$
32. The Cob Builders Handbook by Becky Bee — \$39.95 (add postage) \$

NEW ZEALAND READERS: the four books marked **NZ** are now available in selected New Zealand bookshops. Ask your bookshop to order them from Touchwood Books, Hastings.

POSTAGE (Add post & handling)

Total Price of all books/items:

Up to \$20.00 — add \$4.00
 \$20.00 - \$75.00 — add \$8.00
 Over \$75.00 — add \$10.00

SUBSCRIPTIONS

NZ readers: add A\$15 per \$50.00 (or part)

Please post me: 4 (1 year) 8 (2 years) 12 (3 years) issues, starting with number.....

I enclose: ☐ \$19.00 (One year) ☐ \$38.00 (Two years) ☐ \$57.00 (Three years)

(add \$10 per year for overseas sea mail) \$

No need to cut this page; just send us the details in a letter if you prefer.

TOTAL ENCLOSED \$

CREDIT CARD

VISA / MASTERCARD / BANKCARD (Circle)

Expiry Date:/...../.....

Number: _ _ _ _ / _ _ _ _ / _ _ _ _ / _ _ _ _

Signature:

Name

Address

Postcode

Send cheque/money order/credit card details to: Earth Garden, RMB 427, Trentham, Victoria, 3458.

THE WEATHERPROOF COUNTRY SHOW



Come out of the cold this winter into the warmth of the Weekly Times Country Living Show for ideas and inspiration.

The Weekly Times Country Living Show focusses on the needs of the small property owner – crop and stock options, alternative building, energy options, opportunities for alternative income, sewerage treatment, conservation and land care.

Children will enjoy patting an alpaca, spending time in the animal nursery or seeing a wedge-tailed eagle up close. Food, wine, clothes and furniture are just some of the 250 exhibits at the Show. Visitors will have the chance to win their own Good Life library, a holiday on a host farm and lots more.

All under cover and with plenty of on-site parking.

The Weekly Times – a bright spot this winter.

Inquiries 03 5983 2400

JULY 10–12
Caulfield Racecourse





ISSN 0310-222X

